CATALOG No. 10

"Always Reliable" Plumbers' Tools

MANUFACTURED BY

OTTO BERNZ CO., Inc.

17-37 ASHLAND STREET NEWARK, N. J., U. S. A.

Established 1876 Incorporated 1923

OFFICE AND WORKS OF

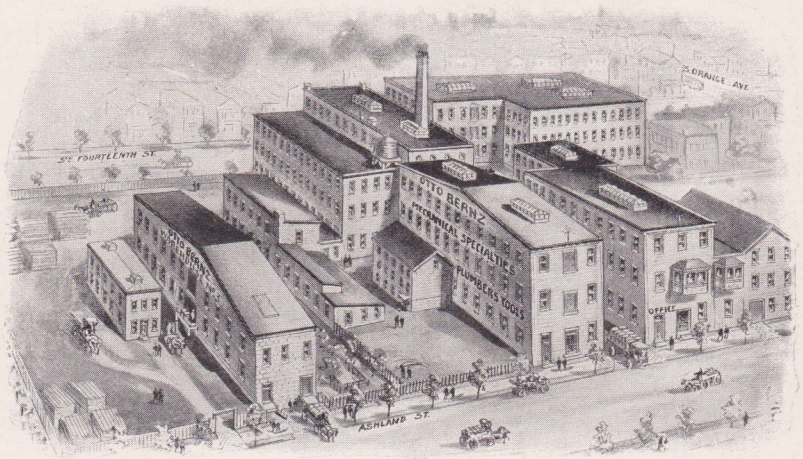
OTTO BERNZ CO., INC.

MANUFACTURERS OF

TORCHES, FURNACES, BRAZIERS,

AND

PLUMBERS' TOOLS



17-37 ASHLAND STREET, NEWARK, N. J., U. S. A.

ESTABLISHED 1876 INCORPORATED 1923

MR. OTTO BERNZ

President and Treasurer

Founder in 1876

Foreword

This catalog illustrates the full "Always Reliable" line of plumbers' tools. These articles are manufactured from the best materials obtainable and by skilled workmen, therefore, are fully guaranteed as to quality and workmanship.

In addition to the plumbers' tools illustrated herein, we also manufacture the complete line of "Always Reliable" torches and furnaces. Please write for the catalog illustrating and describing these articles.

The goods referred to above have been manufactured by us since 1876. Since that time we have built up a wonderful reputation on quality. Due to this reputation, we have year by year increased our sales so that today we are the largest manufacturers in our line.

A large stock is usually carried on hand which enables prompt shipments on all of the articles we manufacture. Buyers will readily acknowledge there is a great saving of time and freight charges caused by placing orders with us due to the large variety which we are prepared to furnish.

OTTO BERNZ CO., INC.

ALPHABETICAL INDEX

	Page
Air Gauges	39
Augers:	
Closet	34
Gas Fitters' and Mud	6
Bags, Tool:	
Electricians'	50
Plumbers'	52-53
Basin Wrenches	57
Belt Punches	7
Bending Forms	6
Bending Pins	6
Bending Springs, Pipe	6-7
Bent Nose Pliers	37
Bibb Seat Dressers	9
Bibb Seat Dresser Cutters	9
Bits for Braces	10
Bits, Expansive	24
Blow Pipes:	
Gas and Air	8
Mouth	7
Bobs, Plumb	35
Bolts, Closet	20
Borers, Tap	47
Bossing Sticks	8
Braces	10
Brick Chisels	16
Brushes, Soil	45
Burner Pliers	36
Calipers:	
Double	11
Inside	11
Outside	11
Wing	12
Candle Holder	10
Cape Chisels	15
Caulking Chisels:	
Corner	14
Left Hand	13
Regular	13
Right Hand	13
Stub	13
Ceiling Irons	12
Cement, Gas Fitters'	12
Chains	18
Chain Stays	19
Charcoal Furnace	25
Chipping Knives	12
Chisels:	
Brick	16
Cape	15
Caulking, all kinds	13-14
Cold	16
Diamond Nose	15
Firmer	16
Floor	17
Gasket	14
Half Round Nose	15
Picking	15
Round Nose	15
Spring Packing	14
Wood	16
Yarning	14
Cleaners, Pipe	33
Closet Augers	34
Closet Bolts	20
Closet Pulls	21-22
Closet Screws	20
Cloths, Wiping	56
Cock Hole Covers	23
Cold Chisels	16
Columns, Mercury	39-40
Combination Pliers:	
Bent Nose	37
Regular	36
Side Cutting	37
Compasses, Plain	23
Compass Saws	41
Coppers, Soldering	46
Cutters:	
Gauge Glass	59
Lead Pipe	35
Washer	54-55
Diamond Nose Chisel	15
Dividers, Wing	56
Double Calipers	11
Double Edge Saws	41
Dressers:	
Bibb Seat	9
Wood	23
Drift Plugs	23
Eight Hooks	19
Elbows, Rubber Extension	24
Ether Cock	39
Expanding Plier	37
Expansive Bits	24
Files	24
File Handle	25
Firmer Chisels	16
Firmer Gouges	17
Floor Chisels	17
Force Cups	34
Force Pumps:	
Gas Main	38
Regular	38
Forms, Bending	6
Furnace, Charcoal	25
Gas Fitters' Augers	6
Gas Fitters' Cement	12
Gasket Chisels	14
Gas Pliers	37
Gauge Glass Cutter	59
Gauges, Air	39
Gimlets	25
Glass Cutter Attachments for Rose Washer Cutters	55
Glass, Looking	30
Gouges:	
Firmer	17
Wood	17
Grease, Rosin and Flour Boxes	26
Guides, Closet Handle	27
Gutter Strainers	26
Hack Saw Frames	42
Hack Saw Blades	42
Half Round Nose Chisel	15
Hammers:	
Machinists'	28
Riveting	28
Handle Guides, Closet	27
Hooks:	
Eight or S	19
Measuring Tape	59
Pot	36
Shave	43
Hose Attachments	26
Inside Calipers	11

ALPHABETICAL INDEX—Continued

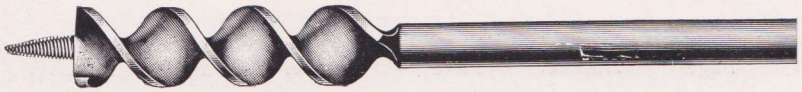
	Page
Irons:	
Caulking	13-14
Ceiling	12
Kinking	17
Round	40
Soldering	46
Throat	17
Joint Runners	29
Kinking Iron	17
Knives, Chipping	12
Ladles, Melting	29-59
Looking Glass	30
Machinists' Hammers	28
Mallet	30
Measuring Tapes	30
Measuring Tape Hook	59
Melting Ladles	29-59
Mercury Columns	39-40
Metal Pots	35
Monkey Wrenches	57
Moulds:	
Pig Lead	31
Strap Solder	31
Tack	31-32
Mud Augers	6
Oil Cans	33
Outside Calipers	11
Packing Chisels	14
Picking Chisel	15
Pig Lead Moulds	31
Pins:	
Bending	6
Turn	50
Pipe Bending Springs	6-7
Pipe Cleaners	33
Pipe Cutters, Lead	35
Pipe Vise	46
Pipes, Blow:	
Gas and Air	8
Mouth	7
Pliers:	
Burner	36
Combination, Bent Nose	37
Combination, Regular	36
Combination, Side Cutting	37
Expanding	37
Gas	37
Side Cutting, Regular	38
Plugs:	
Drift	23
Sand	41
Testing	48-49
Plumb Bobs	35
Plumbers' Friends	34
Pot Hook	36
Pots:	
Solder or Metal	35
Pouring	36
Pulls, Closet	21-22
Pumps:	
Force, Gas Main	38
Force, Regular	38
Testing	39-40
Punches, Belt or Saddlers'	7
Rasps	25
Rasp Handle	25
Riveting Hammers	28
Rivet Sets and Headers	40
Round Irons	40
Round Nose Chisel	15
Rules	41
Runners, Joint	29
Saddlers' Punches	7
Sand Plugs	41
Saws:	
Compass	41
Double Edge	41
Hack	42
Single Edge	42
Screw Drivers	43
Screw Driver Handles	43
Screws, Closet	20
Shave Hooks	43
Shave Hook Blades	43
S Hooks	19
Side Cutting Pliers	37-38
Side Edgers	44
Single Edge Saws	42
Smoke Testing Machines	44
Snips, Tinners'	51
Soil Brushes	45
Soil Cups	45
Soil, Prepared	45
Soldering Coppers	46
Soldering Copper Handle	46
Solder Pots	35
Split Links	19
Spring Packing Chisels	14
Steamer, Thawing	47
Stillson Wrenches	57
Strainers, Gutter	26
Strap Solder Moulds	31
Strap Wrenches	58
Straps for Strap Wrenches	58
Strap for Pipe Vise	46
Tack Moulds	31-32
Tap Borers	47
Tapes, Measuring	30
Testing Machines, Smoke	44
Testing Plugs	48-49
Testing Plug Rubbers	50
Testing Plug Wrench	48
Testing Pump	39-40
Thawing Steamer	47
Throat Iron	17
Tinners' Snips	51
Tool Bags:	
Electricians'	50
Plumbers'	52-53
Tool Roll	53
Turn Pins	50
Vise, Pipe	46
Vise Strap	46
Washer Cutters	54-55
Washers for Closet Bolts and Screws	20
Wing Calipers	12
Wing Dividers	56
Wiping Cloths	56
Wood Chisels	16
Wood Gouge	17
Wrenches:	
Basin	57
Monkey	57
Stillson	57
Strap	58
Testing Plug	48
Wrench Straps	58
Yarning Chisels	14

NUMERICAL INDEX

Number	Page	Number	Page	Number	Page	Number	Page
1	6	59	19	120	31	179	46
2	6	60	19	121	31	180	46
3	6	61	20	122	31	181	46
4	6	62	20	123	32	182	46
5	6	63	20	124	32	183	46
6	6	64	20	125	32	184	47
7	6	65	20	126	33	185	47
8	7	66	20	127	33	186	47
9	7	67	20	128	33	187	48
10	7	68	20	129	34	188	48
11	7	69	21	130	34	189	48
12	8	70	21	131	34	190	49
13	8	71	21	132	35	191	49
14	8	72	21	133	35	192	49
15	8	73	21	134	35	193	49
16	9	74	21	135	36	194	50
17	9	75	22	136	36	195	50
18	9	76	22	137	36	196	50
19	10	77	22	138	36	197	51
20	10	78	22	140	37	198	51
21	10	79	22	141	37	199	51
22	10	80	22	142	37	200	52
23	11	81	23	143	37	201	52
24	11	82	23	144	38	202	52
25	11	83	23	145	38	203	52
26	12	84	23	146	38	204	53
27	12	85	23	147	39	205	53
28	12	86	23	148	39	206	53
29	12	87	24	149	40	207	53
30	13	88	24	150	40	208	54
31	13	89	24	151	40	209	54
32	13	90	24	152	41	210	54
33	13	91	25	153	41	211	55
34	14	92	25	154	41	212	55
35	14	93	25	155	41	213	55
36	14	94	25	156	41	214	55
37	14	96	25	157	41	215	55
38	15	97	26	158	42	216	55
39	15	98	26	159	42	217	55
40	15	99	26	160	42	218	55
41	15	100	26	161	42	219	55
42	15	101	27	162	43	220	56
43	16	102	27	163	43	221	56
44	16	103	27	164	43	222	56
45	16	104	27	165	43	223	56
46	16	105	28	166	43	224	56
47	17	106	28	167	43	225	57
48	17	107	28	168	43	226	57
49	17	108	28	169	43	227	57
50	17	109	29	170	43	228	57
51	17	110	29	171	44	229	57
52	18	111	29	172	44	230	58
53	18	113	30	173	45	231	58
54	18	114	30	174	45	232	58
55	18	115	30	175	45	233	58
56	19	116	30	176	45	234	59
57	19	118	31	177	45	235	59
58	19	119	31	178	46	236	59

GAS FITTERS' OR MUD AUGERS

No. 1



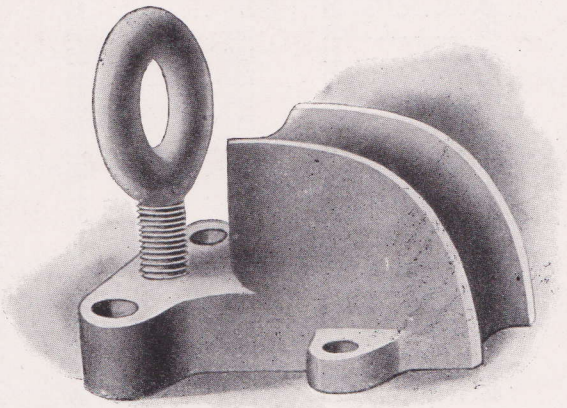
Made of a special crucible steel especially adapted for augers.

Twist 6" to 8" long. Always furnished with straight round shank about 12" long, unless otherwise ordered. Extra charge made for square end.

Auger Size	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/2"	3"
Pipe Size	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Weight, per doz..	12 lbs.	18 lbs.	20 lbs.	22 lbs.	24 lbs.	27 lbs.	42 lbs.	44 lbs.	48 lbs.	55 lbs.

BENDING FORMS

No. 2



Number.....	1	2
Weight, each.....	12 lbs.	22 1/2 lbs.

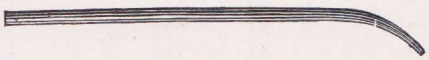
Made from malleable iron with the exception of the eye bolt, which is wrought iron.

BENDING PINS

No. 3

No. 5

No. 4



No. 6

These articles are made from round steel.

Length 13"

Size of Steel.....	1/2"	9/16"
Weight, per dozen.....	12 lbs.	15 lbs.

REGULAR PIPE BENDING SPRINGS

No. 7

Made from spring wire of the correct temper to prevent kinking.

Length 23"

Size.....	1"	1 1/4"	1 1/2"	2"
Weight, per dozen.....	21 1/2 lbs.	31 lbs.	41 lbs.	58 1/2 lbs.

PIPE BENDING SPRINGS WITH IRON PIPE CONNECTION

No. 8

Made from spring wire of the correct temper to prevent kinking. Ends are grey iron.

Length 24½"

Size	1¼"	1½"	2"
Weight, per dozen	39 lbs.	51 lbs.	72 lbs.

BELT AND SADDLERS' PUNCHES

No. 9

Made from planished steel. The barrel of this style punch is swaged and the slot is milled out.

Number	1 to 6	7 to 9	10 to 12	13 and 14	15 and 16
Weight, per dozen	1 lb.	1¼ lbs.	1½ lbs.	2½ lbs.	3¼ lbs.

PLAIN BLOW PIPES

No. 10

Made entirely of brass.

Size	8"	9"	10"	11"	12"
Weight, per dozen	5 oz.	6 oz.	7 oz.	8 oz.	9 oz.

BLOW PIPES WITH BALL

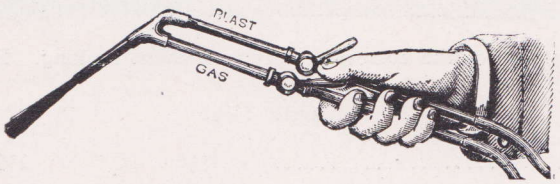
No. 11

Made entirely of brass.

Size	8"	9"	10"	11"	12"
Weight, per dozen	5 oz.	6 oz.	7 oz.	8 oz.	9 oz.

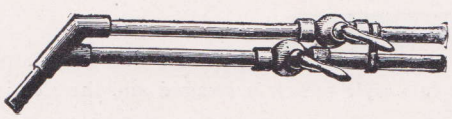
GAS AND AIR BLOW PIPES FOR BRAZING

No. 12



Air jet $\frac{3}{16}$", Gas opening $\frac{7}{16}$", for $\frac{3}{8}$" gas pipe. Weight, each 10½ oz.

No. 13

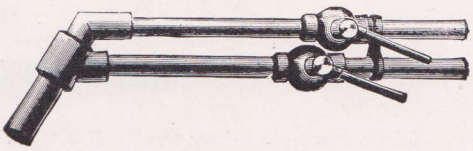


Air jet $\frac{5}{16}$"

Gas opening $\frac{5}{8}$"

For ½" gas pipe

No. 14



Air jet $\frac{3}{8}$"

Gas opening 1"

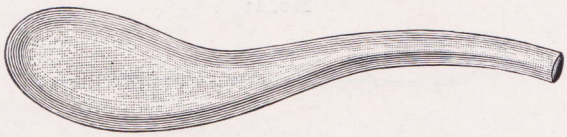
For ¾" gas pipe

Number	13	14
Weight, each	1⅜ lbs.	1¾ lbs.

These blow pipes are made of seamless brass tubing and have cast brass fittings.

BOSSING STICKS

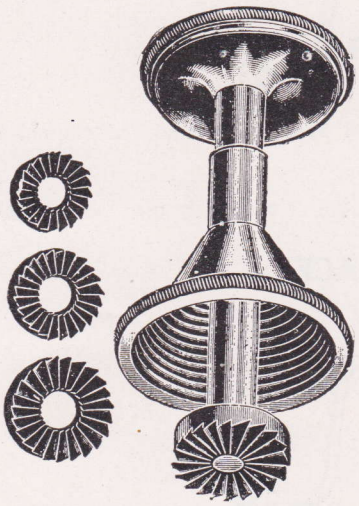
No. 15



Kind	Dogwood	Boxwood	Lignum Vitae
Weight, per dozen	13 lbs.	14 lbs.	17 lbs.

BIBB SEAT DRESSERS

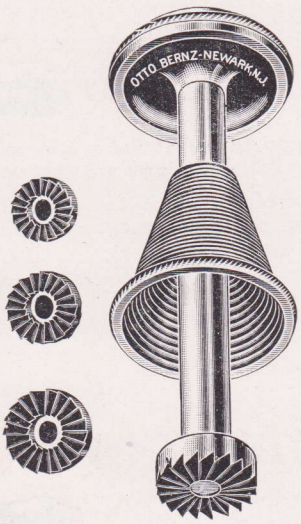
No. 16



Regular style with cone threaded on inside only.

Handle and cone are made of cast brass. Stem is steel. All parts are heavily nickel plated.

No. 17



Double style with cone threaded on inside and outside.

Handle and cone are made of cast brass. Stem is steel. All parts are heavily nickel plated.

Each bibb seat dresser is furnished with four cutters made of best tool steel.

Style	Regular	Double
Weight, per dozen	9 lbs.	9 lbs.

CUTTERS FOR BIBB SEAT DRESSERS

No. 18

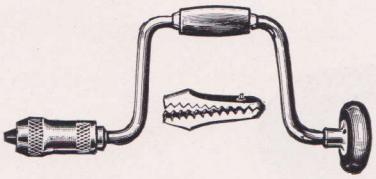
Diameter	$\frac{9}{16}$"	$\frac{5}{8}$"	$\frac{3}{4}$"	$\frac{7}{8}$"
Size of bibb	$\frac{3}{8}$"	$\frac{1}{2}$"	$\frac{5}{8}$"	$\frac{3}{4}$"
Weight, per dozen	3 oz.	5 oz.	6 oz.	10 oz.

Larger sizes made to order

Made of best tool steel.

PLAIN BRACES

No. 19

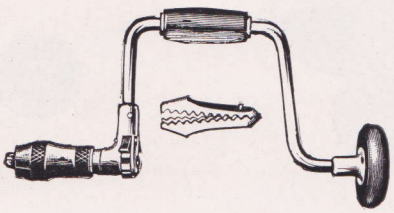


Exposed metal parts are polished. Head and handle are made of stained hardwood. Alligator jaws are cast steel.

Size, sweep	8″	10″	12″
Weight, per dozen	15½ lbs.	21 lbs.	23 lbs.

RATCHET BRACES

No. 20



Exposed metal parts are polished. Head and handle are made of stained hardwood. Alligator jaws are cast steel.

Size, sweep	8″	10″	12″
Weight, per dozen	19½ lbs.	25 lbs.	27 lbs.

BITS FOR BRACES

No. 21

Made of steel especially adapted for this purpose.

Size	¼″	⅜″	½″	⅝″	¾″	⅞″	1″
Weight, per doz.	1 lb.	1½ lbs.	2⅜ lbs.	2¾ lbs.	4 lbs.	5 lbs.	7 lbs.
Size	1⅛″	1¼″	1⅜″	1½″	1⅝″	1¾″	1⅞″	2″
Weight, per doz.	8¾ lbs.	10½ lbs.	11¾ lbs.	16⅜ lbs.	16⅝ lbs.	17 lbs.	17¼ lbs.	30 lbs.

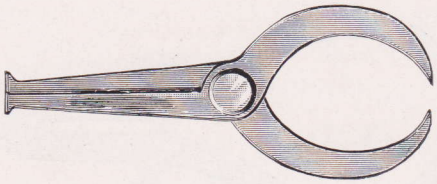
CANDLE HOLDER

No. 22

Shank is made of steel, and holder is brass. Weight, per dozen 4 lbs.

DOUBLE CALIPERS

No. 23

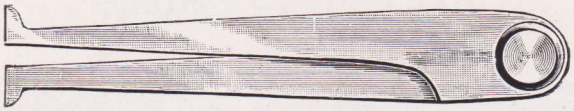


Made from sheet steel. Extra heavy washers are used which make firm, reliable joints.

Size	3″	4″	5″	6″
Weight, per dozen	½ lb.	½ lb.	1¼ lbs.	1½ lbs.

INSIDE CALIPERS

No. 24

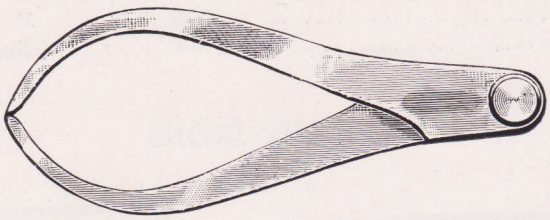


Made from sheet steel. Extra heavy washers are used which make firm, reliable joints.

Size	2½″	3″	4″	5″	6″	7″
Weight, per dozen	⅜ lb.	½ lb.	¾ lb.	1⅛ lbs.	1¾ lbs.	2½ lbs.
Size	8″	9″	10″	12″	15″	18″
Weight, per dozen	3 lbs.	3⅝ lbs.	4⅞ lbs.	7½ lbs.	9 lbs.	10 lbs.

OUTSIDE CALIPERS

No. 25

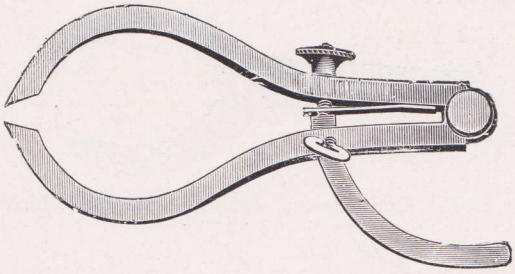


Made from sheet steel. Extra heavy washers are used which make firm, reliable joints.

Size	2½″	3″	4″	5″	6″	7″
Weight, per dozen	½ lb.	½ lb.	¾ lb.	1¼ lbs.	2 lbs.	2½ lbs.
Size	8″	9″	10″	12″	15″	18″
Weight, per dozen	3 lbs.	4 lbs.	5¼ lbs.	8¼ lbs.	10½ lbs.	11 lbs.

WING CALIPERS

No. 26



Made of tool steel. Extra heavy washers are used which make firm, reliable joints.

Size	6″	8″	10″	12″
Weight, per dozen	3½ lbs.	4¾ lbs.	8¼ lbs.	10¾ lbs.

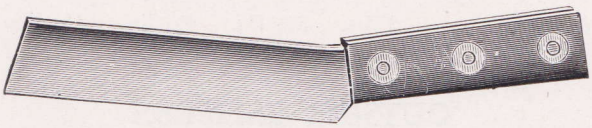
GAS FITTERS' CEMENT

No. 27

Weight, per bar 1 lb.

CHIPPING KNIVES

No. 28

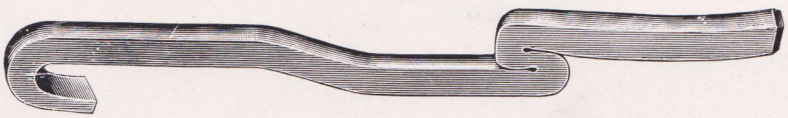


Blade is made of a good steel which will give good service, and handle is leather.

Size	4½″	5″	6″
Weight, per dozen	5½ lbs.	5¾ lbs.	6 lbs.

CEILING IRONS

No. 29



Made from good octagon steel.

Length	11″	16″
Size of steel	⅝″	⅝″
Weight, per dozen	16 lbs.	20 lbs.

STUB CAULKING CHISELS

No. 30

Made from good octagon steel.

Size of steel.....	8½"x½"	8½"x⅝"	8½"x¾"
Weight, per dozen.....	6 lbs.	9 lbs.	13½ lbs.

REGULAR CAULKING CHISELS

No. 31

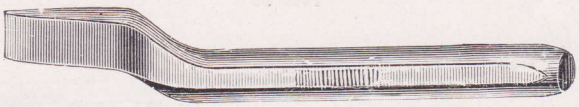
Made from good octagon steel.

Size of steel.....	8½"x½"	8½"x⅝"	8½"x¾"
Weight, per dozen.....	6 lbs.	9 lbs.	13½ lbs.

RIGHT HAND, AND LEFT HAND CAULKING CHISELS

With Small Offset

No. 32



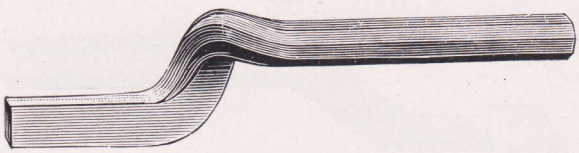
Made from good octagon steel.

Size of steel.....	8"x⅝"	8"x¾"
Weight, per dozen.....	9 lbs.	13½ lbs.

RIGHT HAND, AND LEFT HAND CAULKING CHISELS

With Large Offset

No. 33



Made from good octagon steel.

Size of steel.....	10"x⅝"	10"x¾"
Weight, per dozen.....	12 lbs.	16 lbs.

YARNING CHISELS

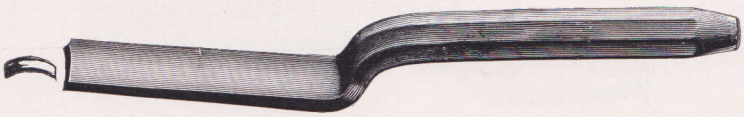
No. 34

Made from good octagon steel.

Size of steel.....	½"x10"	½"x15"	⅝"x10"	⅝"x15"	¾"x10"	¾"x15"
Weight, per dozen.....	6 lbs.	9 lbs.	9 lbs.	12 lbs.	12 lbs.	15 lbs.

LONG GASKET CHISELS

No. 35

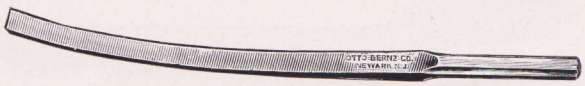


Made from good octagon steel.

Size of steel.....	9"x⅝"	9"x¾"
Weight, per dozen.....	8 lbs.	10 lbs.

SPRING PACKING CHISELS

No. 36

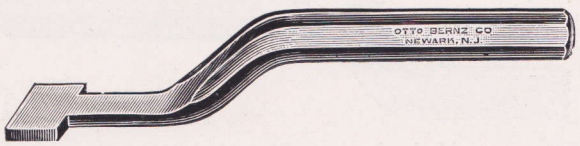


Made from best ½" octagon tool steel.

Size.....	12"	18"
Weight, per dozen.....	6 lbs.	9 lbs

CORNER CAULKING CHISEL

No. 37



Made from good ¾" octagon steel.

Length 10" Weight, per dozen 12 lbs.

CAPE CHISELS

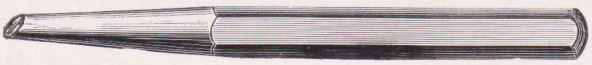
No. 38

Made from best octagon tool steel.

Size of Steel.....	8½"x½"	8½"x⅝"	8½"x¾"
Weight, per dozen.....	6 lbs.	9 lbs.	12 lbs.

ROUND NOSE CHISEL

No. 39

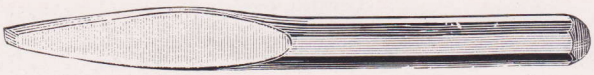


Made from best ¾" octagon tool steel.

Length 8½" Weight, per dozen 12 lbs.

HALF ROUND NOSE CHISEL

No. 40



Made from best ¾" octagon tool steel.

Length 8½" Weight, per dozen 12 lbs.

DIAMOND NOSE CHISEL

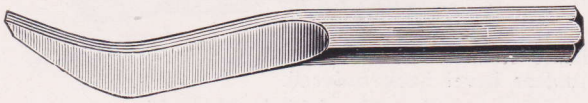
No. 41

Made from best ¾" octagon tool steel.

Length 8½" Weight, per dozen 12 lbs.

PICKING CHISEL

No. 42



Made from best ¾" octagon tool steel.

Length 8½" Weight, per dozen 10½ lbs.

COLD CHISELS

No. 43

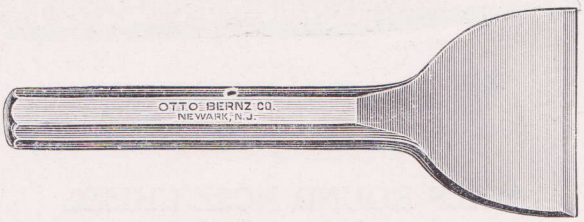
Made from best octagon tool steel.

Size of steel	½″	½″	¾″	¾″	⅞″	1″	1″
Length	5½″	6″	7″	8″	8″	8″	9″
Width of cut	⅝″	⅝″	⅞″	⅞″	1″	1⅛″	1⅛″
Weight, per dozen	3½ lbs.	4 lbs.	10½ lbs.	12 lbs.	15 lbs.	19½ lbs.	24 lbs.

Special sizes made to order.

BRICK CHISELS

No. 44



Made from best octagon tool steel.

Length 8½″

Width of face	2½″	3″	3½″	4″
Weight, per dozen	9 lbs.	9½ lbs.	10½ lbs.	11½ lbs.

WOOD CHISELS

No. 45

Made from best octagon tool steel.

Size of steel	⅝″	¾″	¾″
Length	10″	11″	12″
Width of cut	1″	1½″	2″
Weight, per dozen	9 lbs.	14 lbs.	18 lbs.

TANGED FIRMER CHISELS

No. 46

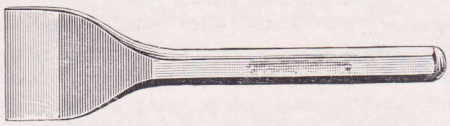
Made of crucible steel and fitted with a plain hickory handle. Always furnished with plain back unless bevel back ordered.

Length of blade 4″ to 5″

Width of face	½″	¾″	1″	1¼″	1½″	2″
Weight, per dozen	1½ lbs.	2½ lbs.	3½ lbs.	4½ lbs.	5¾ lbs.	8 lbs.

FLOOR CHISELS

No. 47

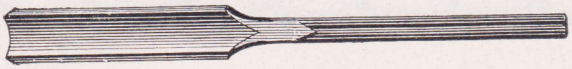


Made from best octagon tool steel.

Length	12″	15″	15″	15″	16″	16″
Width of face	1½″	2″	2½″	3″	3½″	4″
Weight, per dozen	18 lbs.	23 lbs.	25 lbs.	32 lbs.	46 lbs.	49 lbs.

WOOD GOUGE

No. 48



Made from best octagon tool steel.

Length 10½″. Width of face 1″. Weight, per dozen 21 lbs.

TANGED FIRMER GOUGES

No. 49

Made of crucible steel and fitted with a plain hickory handle. Always furnished with outside bevel unless inside bevel ordered.

Length of blade 4″ to 5½″

Width of face	½″	¾″	⅞″	1″	1¼″	1½″
Weight, per dozen	3¾ lbs.	5 lbs.	5¼ lbs.	6 lbs.	8 lbs.	9 lbs.

KINKING IRON

No. 50

Made of $\frac{9}{16}$″ round steel.

Length 12″ Weight, per dozen 12 lbs.

THROAT IRON

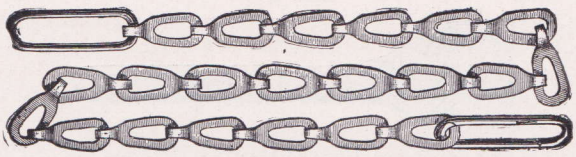
No. 51

Made from good ¾″ octagon steel.

Length 6″ Weight, per dozen 6¾ lbs.

BRASS PLUMBERS' LINK CHAINS WITH SNAPS

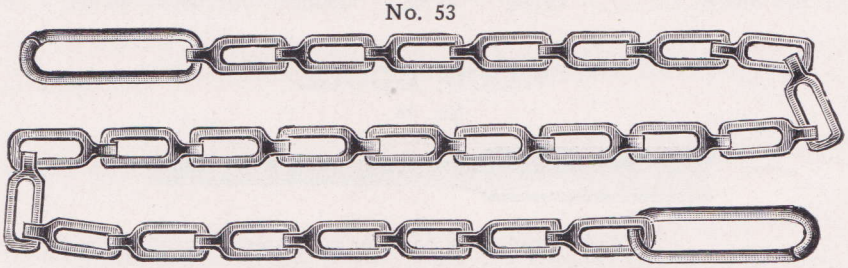
No. 52



See prices and weights listed below.

BRASS SAFETY LINK CHAINS WITH SNAPS

No. 53



See prices and weights listed below.

The above chains are packed in boxes, 12 lengths to each box.

BASIN CHAINS, 16½" LONG

Number	00	0	1
Price, per box	$1.00	$1.20	$1.40
Weight, per box	⅜ lb.	½ lb.	¾ lb.

WASH TRAY CHAINS, 19¾" LONG

Number	00	0	1	2
Price, per box	$1.15	$1.35	$1.60	$1.95
Weight, per box	½ lb	¾ lb.	1 lb.	1¼ lbs.

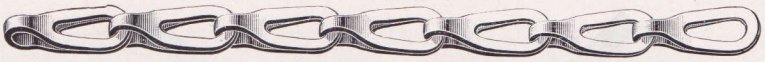
BATH TUB CHAINS, 26¼" LONG

Number	00	0	1	2
Price, per box	$1.40	$1.65	$2.00	$2.45
Weight, per box	¾ lb.	1 lb.	1⅛ lbs.	1¼ lbs.

The following extras apply to the nickel plated finish: Basin chains, $ .05 dozen net; Wash tray chains, $ .06 dozen net; Bath tub chains, $ .07 dozen net.

BRASS AND STEEL PLUMBERS' LINK CHAIN

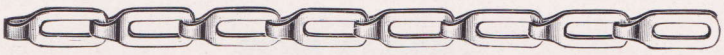
No. 54



See prices and weights listed below.

BRASS AND STEEL SAFETY LINK CHAIN

No. 55



See prices and weights listed below.

Number	00	0	1
Brass, price per hundred feet	$4.00	$5.00	$6.25
Steel, price per hundred feet	$3.00	$3.50	$4.00
Weight, per hundred feet	2 lbs.	2½ lbs.	3½ lbs...

The following extras apply to the nickel plated finish: Brass chain, $ .10 per hundred feet net; Steel chain, $ .20 per hundred feet net.

Above chain is put up on reels of 500 feet.

When chain is attached to closet pulls, a small charge is made for assembling.

BRASS SPLIT LINKS

No. 56

Large

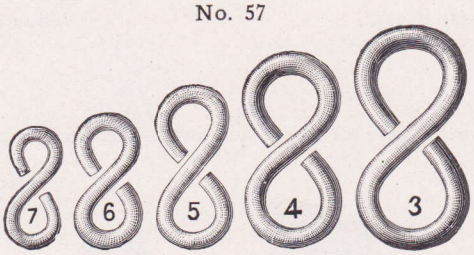
Small

Size	Large	Small
Weight, per gross	1 lb.	½ lb.

An extra charge of $ .10 per gross, net, is made for the nickel plated finish.

S OR EIGHT HOOKS

No. 57



Number	1	2	3	4	5	6
Price, per gross	$2.25	$1.80	$1.50	$1.30	$1.10	$ .90
Weight, per gross	2 lbs.	1¾ lbs.	1¼ lbs.	1 lb.	¾ lb.	½ lb.

Number	7	½	1½	2½	3½
Price, per gross	$ .85	$3.25	$2.75	$2.00	$1.50
Weight, per gross	¼ lb.	3¼ lbs.	2½ lbs.	1¾ lbs.	1¼ lbs.

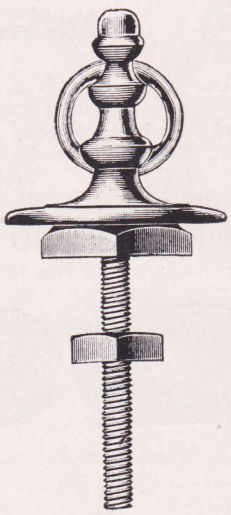
The above prices apply only to the brass finish.
The following extras apply to the nickel plated finish:
Nos. 1, 2, ½, 1½, 2½—$ .12 gro. net.
Nos. 3, 4, 5, 6, 7, 3½—$ .08 gro. net.

CHAIN STAYS

No. 58

Made of stamped sheet brass and turned brass rod, heavily nickel plated. The threaded end and nut are furnished in plain brass.

No. 59



Made of cast brass, heavily nickel plated The threaded end and nut are furnished in plain brass.

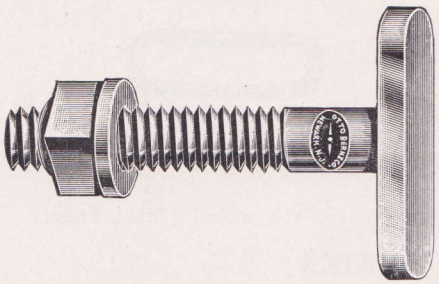
No. 60

Made of cast brass, heavily nickel plated. The threaded end and nut are furnished in plain brass.

Number	58	59	60
Weight, per gross	9 lbs.	18 lbs.	24 lbs.

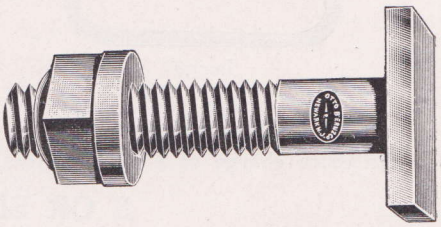
CLOSET BOLTS

No. 61



Made of cast brass.

No. 62

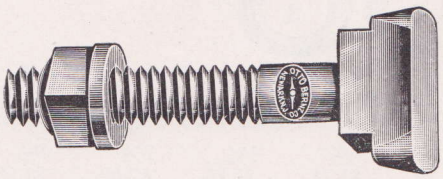


Made of cast brass.

	61	62
Number		
Length under head	1½"	1⅜"
Diameter	5/16"	5/16"
Weight, per M	57½ lbs	47 lbs.

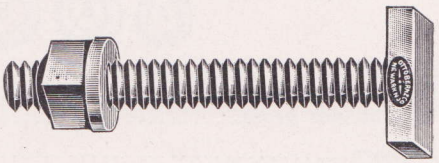
All bolts, unless otherwise ordered, are furnished with nickel plated brass open square head.

No. 63



Made of cast brass.

No. 64



Made from brass rod with brass stamped base.

	63	64	64	64	64
Number					
Length under head	1½"	1½"	2"	2½"	3"
Diameter	¼"	¼"	¼"	¼"	¼"
Weight, per M	68 lbs.	40 lbs.	45 lbs.	50 lbs.	55 lbs.

All bolts, unless otherwise ordered, are furnished with nickel plated brass open square head.

CLOSET SCREWS

No. 65

Length 2½", diameter ¼", with nickel plated brass closed square head.

No. 66

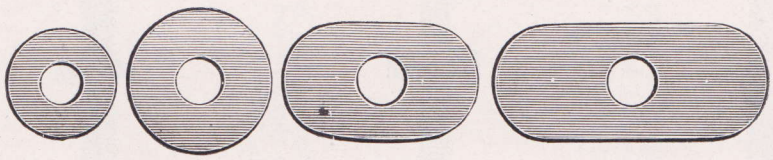
Length 2½", diameter ¼", with nickel plated brass closed hexagon head.

Screws furnished in brass, iron, and iron brass plated.

Kind	Brass	Iron	Iron brass plated
No. 65—Weight, per M	62½ lbs.	62½ lbs.	62½ lbs.
No. 66—Weight, per M	104 lbs.	104 lbs.	104 lbs.

WASHERS FOR BOLTS AND SCREWS

No. 67 No. 68



Made of brass, heavily nickel plated.

	67	67	68	68
Number				
Size	¾"	1"	1¼"x¾"	1¾"x¾"
Thickness	.020"	.025"	.025"	.025"
Weight, per M	3⅛ lbs.	4⅜ lbs.	5⅝ lbs.	7½ lbs.

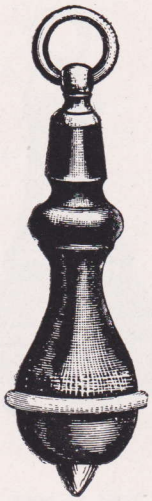
CLOSET PULLS

No. 69

Made of wood.

Fitted with tight rubber ring. Rod through center. Can be furnished in any stained finish and in white enameled finish.

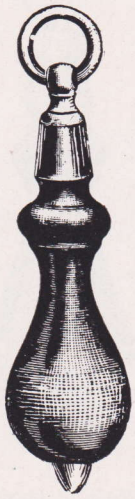
No. 70



Made of wood.

Fitted with tight rubber ring. No rod through center. Can be furnished in any stained finish and in white enameled finish.

No. 71



Made of wood.

No rubber ring nor rod through center. Can be furnished in any stained finish and in white enameled finish.

	69	70	71
Number			
Weight, per dozen	1½ lbs.	1½ lbs.	1½ lbs.

No 72

Made of wood.

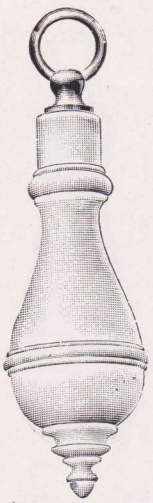
Fitted with tight screw eye. Can be furnished in rosewood or ebony finishes.

No. 73

Made of wood.

Fitted with cast iron top. Can be furnished in rosewood or ebony finishes.

No. 74



Made of celluloid.

No rubber ring nor rod through center.

	72	73	74
Number			
Weight, per dozen	¾ lbs.	1½ lbs.	1⅛ lbs.

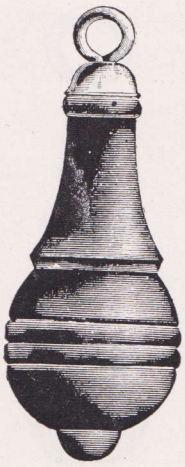
CLOSET PULLS

No. 75

Made of wood.

Fitted with tight rubber ring. Rod through center. Can be furnished in any stained finish, and in white enameled finish.

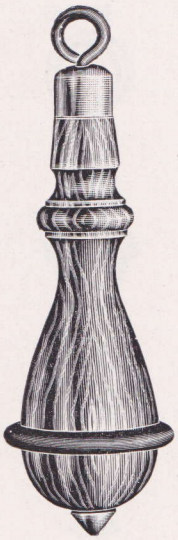
No. 76



Made of wood.

No rubber ring nor rod through center. Can be furnished in black or white enameled finishes.

No. 77

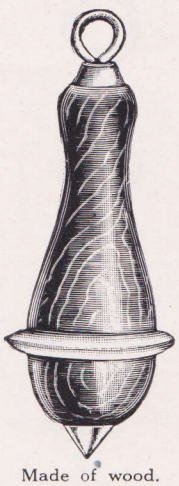


Made of wood.

Fitted with tight rubber ring. No rod through center. Can be furnished in any stained finish and in white enameled finish.

	75	76	77
Number			
Weight, per dozen	1½ lbs.	¾ lbs.	1½ lbs.

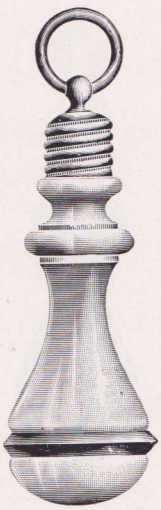
No. 78



Made of wood.

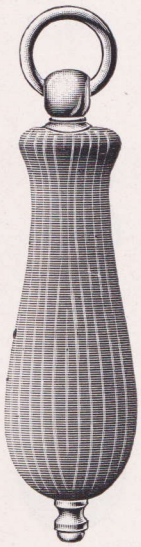
Fitted with tight rubber ring. No rod through center. Can be furnished in any stained finish and in white enameled finish.

No. 79



Made of crystal or opaque glass. Fitted with tight rubber ring. No rod through center.

No. 80



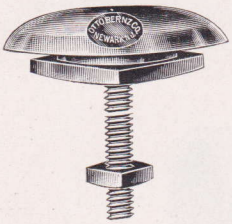
Made of wood.

No rubber ring. Rod through center. Can be furnished in any stained finish.

	78	79	80
Number			
Weight, per dozen	¾ lb.	3¾ lbs.	1½ lbs.

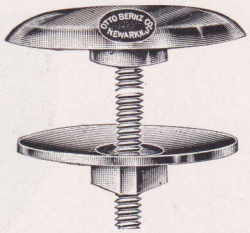
COCK HOLE COVERS

No. 81



Head is made of cast brass. Threaded end and nut are also brass.
This style for basins.
Diameter of top 1½"

No. 82

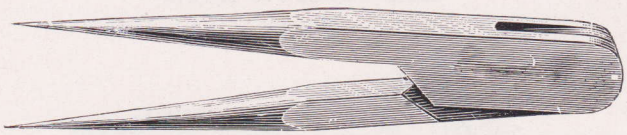


Head and flange are made of cast brass. Threaded end is also brass.
This style for bath tubs.
Diameter of top 1¾"

Number	81	82
Weight, per gross	22½ lbs.	27 lbs.

PLAIN COMPASSES

No. 83

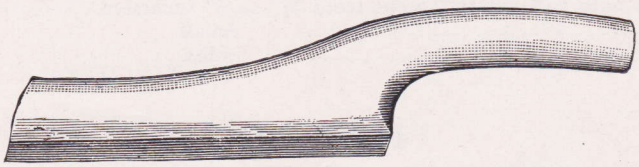


Made of tool steel. The joint is firm which assures accurate adjustments.

Size	3"	4"	5"	6"	7"	8"	9"	10"	12"
Weight, per doz.	1 lb.	1¼ lbs.	1½ lbs.	2¼ lbs.	2¾ lbs.	3¼ lbs.	5 lbs.	5¾ lbs.	7 lbs.

DRESSERS

No. 84



This is our standard dresser, measuring 13¼" overall, 8" face, and 1⅞" wide.

Kind	Dogwood	Boxwood	Lignum Vitae
Weight, per dozen	11 lbs.	12 lbs.	13 lbs.

Larger sizes can also be furnished by us.

DRIFT PLUGS

No. 85

No. 86

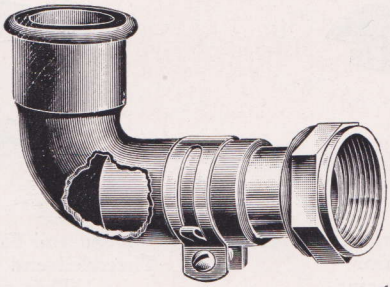
Made in all sizes up to and including 2".

Kind	Dogwood	Boxwood	Lignum Vitae

Weights vary according to diameters. Can be furnished on application.
Larger sizes made to order.

RUBBER EXTENSION ELBOWS

No. 87

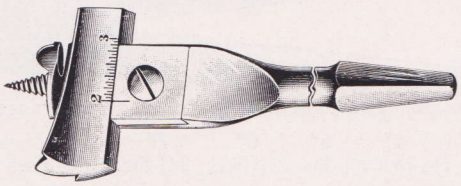


Threaded end is cast brass and is connected to stamped brass sleeve. Clamp and bolt are galvanized steel.

Size	1¼"	1½"	2"
Weight, per dozen	4½ lbs.	6¾ lbs.	10½ lbs.

EXPANSIVE BITS

No. 88



Made of a good grade of tool steel.

Small size furnished with two cutters to cut from ½" to 1½" inclusive. Large size furnished with two cutters to cut from ⅞" to 3" inclusive.

Size	Small	Large
Weight, per dozen	4 lbs.	6 lbs.

FLAT FILES

No. 89

These files are made of a special file steel which will give satisfactory service.

Size	8"	10"	12"	14"
Weight, per dozen	3¼ lbs.	7½ lbs.	12½ lbs.	19¾ lbs.

HALF ROUND FILES

No. 90

These files are made of a special file steel which will give satisfactory service.

Size	8"	10"	12"	14"
Weight, per dozen	3½ lbs.	6¼ lbs.	10¾ lbs.	17¼ lbs.

FLAT WOOD RASPS

No. 91

These rasps are made of crucible steel especially adapted for the purpose.

Size	8″	10″	12″	14″
Weight, per dozen	3½ lbs.	7½ lbs.	12½ lbs.	20¼ lbs.

HALF ROUND WOOD RASPS

No. 92

These rasps are made of crucible steel especially adapted for the purpose.

Size	8″	10″	12″	14″
Weight, per dozen	3½ lbs.	6¾ lbs.	11¼ lbs.	17 lbs.

HANDLE FOR FILES AND RASPS

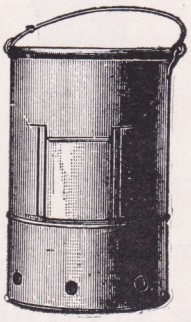
No. 93

Regular wood style with steel ferrule.

Length 5½″. Weight, per dozen 1½ lbs.

CHARCOAL FURNACE

No. 94



Made from 26 gauge sheet iron.

Size 14″x9″ Weight, per dozen 66 lbs.

GIMLETS

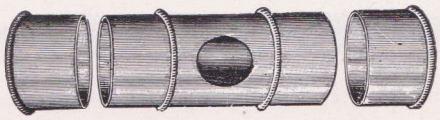
No. 96

The bits are made of crucible steel. Fitted with a neat, varnished wood handle.

Size	18″	24″	30″	36″
Weight, per dozen	3 lbs.	5 lbs.	5¾ lbs.	6¾ lbs.

GREASE, ROSIN AND FLOUR BOXES

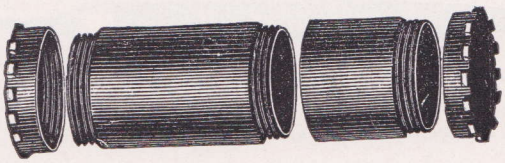
No. 97



Made of spun brass.

Size	Small	Medium	Large
Weight, per dozen	7 lbs.	8 lbs.	9 lbs.

No. 98

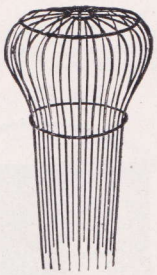


Made of cast brass

Size	Two part	Three part
Weight, per dozen	12 lbs.	19 lbs.

GUTTER STRAINERS

No. 99

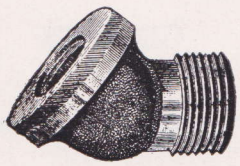


Made of galvanized iron wire.

Size	2″	3″	4″	5″	6″
Weight, per dozen	1 lb.	1½ lbs.	2½ lbs.	4¼ lbs.	7 lbs.

HOSE ATTACHMENTS

No. 100

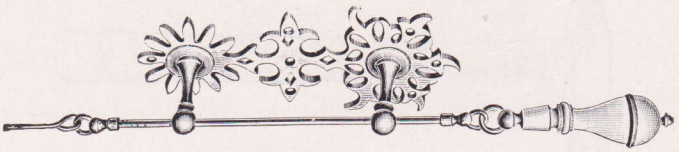


Made of cast brass, with threaded end. Cap is made from sheet brass.

Size	½″	⅝″
Weight, per dozen	4 lbs.	4½ lbs.

HANDLE GUIDES

No. 101

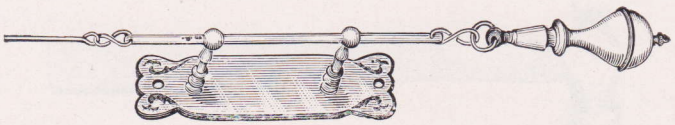


Guide plate is made of cast brass and posts are turned brass. Links are made from brass rod. All parts are heavily nickel plated.

Furnished with No. 69 white enameled closet pull and 4 one foot links to tank.

Weight, per dozen 18½ lbs.

No. 102

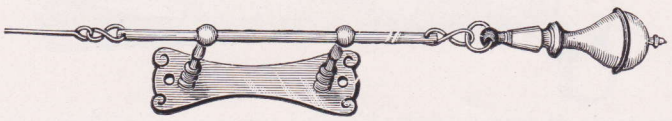


Guide plate is made of cast brass and posts are turned brass. Links are made from brass rod. All parts are heavily nickel plated.

Furnished with No. 69 white enameled closet pull and 4 one foot links to tank.

Weight, per dozen 16½ lbs.

No. 103



Guide plate is made of stamped sheet brass and posts are turned brass. Links are made from brass rod. All parts are heavily nickel plated.

Furnished with No. 69 white enameled closet pull and 4 one foot links to tank.

Weight, per dozen 11½ lbs.

The above guides can be furnished with any of the closet pulls shown on pages 21 and 22. Prices will be charged according to the pulls accepted.

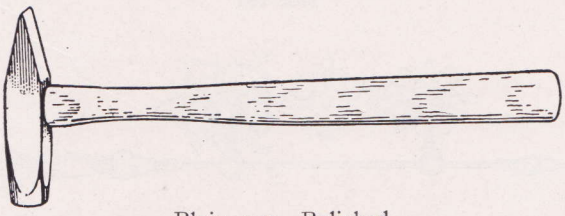
No. 104

No. 69 white enameled pull with five one foot N. P. brass links to tank (no guide plate). Links are stronger, neater and easier to keep clean than chain.

Weight, per dozen 5¼ lbs.

RIVETING HAMMERS

No. 105



Plain eye—Polished

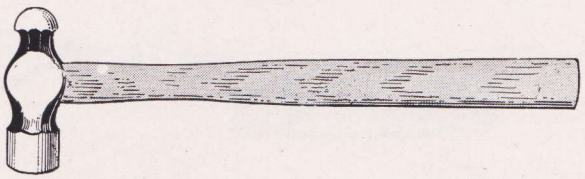
Heads are made of forged steel. Handles are made of hickory. Weights do not include handles.

Size	4 oz.	7 oz.	9 oz.	12 oz.	15 oz.	18 oz.
Weight, per dozen	5 lbs.	8 lbs.	9 lbs.	12 lbs.	15½ lbs.	18½ lbs.

MACHINISTS' HAMMERS

BALL PEIN

No. 106

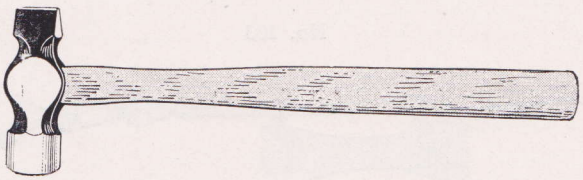


Heads are made of forged steel. Handles are made of hickory. Weights do not include handles.

Size	4 oz.	6 oz.	8 oz.	12 oz.	1 lb.	1¼ lbs.	1½ lbs.	1¾ lbs.	2 lbs.	2½ lbs.	3 lbs.
Weight, doz.	5lbs.	7lbs.	10lbs.	13lbs.	16½lbs.	21lbs.	23½lbs.	26½lbs.	30lbs.	38¼lbs.	45lbs.

STRAIGHT PEIN

No. 107

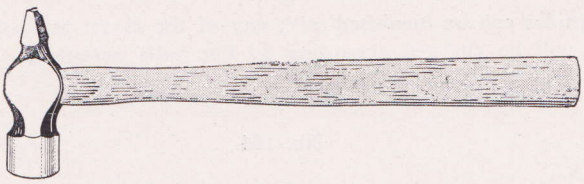


Heads are made of forged steel. Handles are made of hickory. Weights do not include handles.

Size	4 oz.	6 oz.	8 oz.	12 oz.	1 lb.	1¼ lbs.	1½ lbs.	1¾ lbs.	2 lbs.
Weight, per dozen.	5 lbs.	7 lbs.	10 lbs.	13 lbs.	16½ lbs.	21 lbs.	23½lbs.	26½ lbs.	30 lbs.

CROSS PEIN

No. 108

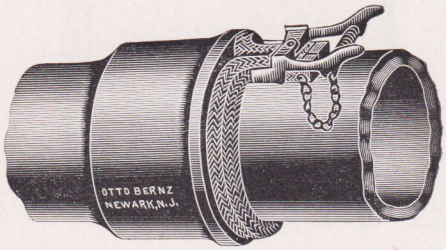


Heads are made of forged steel. Handles are made of hickory. Weights do not include handles.

Size	4 oz.	6 oz.	8 oz.	12 oz.	1 lb.	1¼ lbs.	1½ lbs.	1¾ lbs.	2 lbs.
Weight, per dozen.	5 lbs.	7 lbs.	10 lbs.	13 lbs.	16½ lbs.	21 lbs.	23½lbs.	26½ lbs.	30 lbs.

JOINT RUNNERS

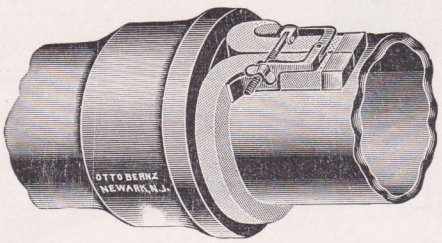
No. 109



The No. 1 and No. 2 are furnished with a ¾" square asbestos packing which has one woven jacket. The No. 3 and No. 4 are furnished with a 1" square asbestos packing which has two woven jackets. All packing used has an asbestos core. Clamps are made of malleable iron.

Number.....	1	2	3	4
Size of pipe.....	2", 3", and 4"	4", 5", and 6"	6", 8", and 10"	10", 12", and 14"
Weight, each....	1⅛ lbs.	1⅜ lbs.	2¾ lbs.	3¼ lbs.

No. 110



All of these joint runners are furnished with a 1¼" square asbestos packing which has three woven jackets. All packing used has an asbestos core. Clamps are made of malleable iron.

Number.....	5	6	7	8	9	10	11	12	13
Size of pipe, inches...	8, 10, 12	10, 12, 14	16, 18, 20	24	30	36	40	42	48
Weight, each, lbs.....	4¾	5¼	6	6½	7	9	9½	10	10½

REGULAR MELTING LADLES

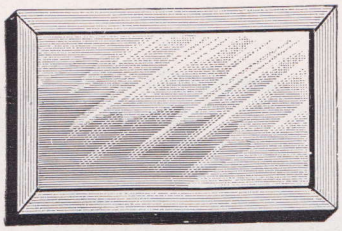
No. 111

Iron handles are welded to bowls. Bowls are wrought iron. Double lipped style always furnished, unless single lipped style is specified.

Outside diameter, in.	2½	3	3½	4	5	6	6 E.H.	7	8	9	10	12
Outside depth, in....	1½	1½	1¾	2	2½	2¾	2¾	3¼	3½	4	4½	6¼
Handle, inches.....	12	12	16	16	20	20	20	26	26	36	36	40
Capacity, lbs.....	1¼	2¼	3	4¼	10¼	14¼	14¼	21	27½	40	50	130
Weight, per doz., lbs.	6	6¼	11	13	26	32	62	74	88	128	152	276

LOOKING GLASS

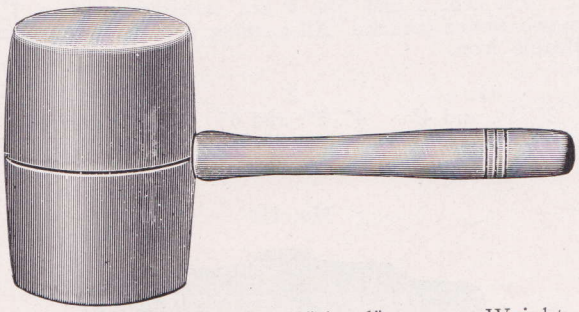
No. 113



Furnished with brass back. Measures 2½"x3¾" Weight, per dozen 4 lbs.

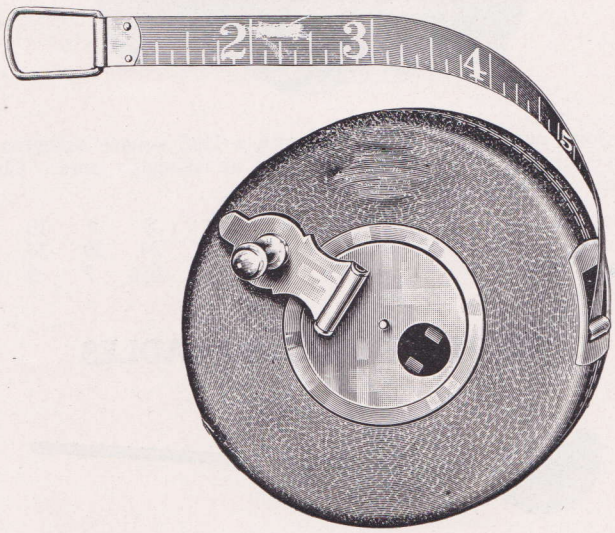
MALLET

No. 114



Made from dogwood Measures 3" by 6" Weight, per dozen 18 lbs.

MEASURING TAPES



No. 115

Made from linen with ass-skin case.

Size	25 feet	50 feet	75 feet	100 feet
Weight, per dozen	1⅞ lbs.	3¼ lbs.	4½ lbs.	5¼ lbs.

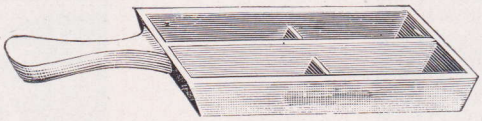
No. 116

Made from high grade steel with steel case covered with mottled black "auto leather" which will give long service.

Size	25 feet	50 feet	75 feet	100 feet
Weight, per dozen	4½ lbs.	8¼ lbs.	12 lbs.	14¼ lbs.

PIG LEAD MOULDS

No. 120

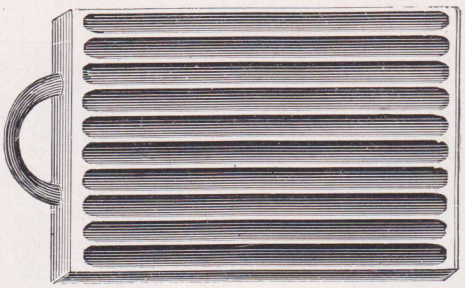


4 bar style
Made of gray iron.

Number	118	119	120
Style	1 bar	2 bar	4 bar
Capacity, per bar	19½ lbs.	5¾ lbs	2¼ lbs.
Weight, each	12½ lbs.	10½ lbs.	11¼ lbs.

STRAP SOLDER MOULDS

No. 121

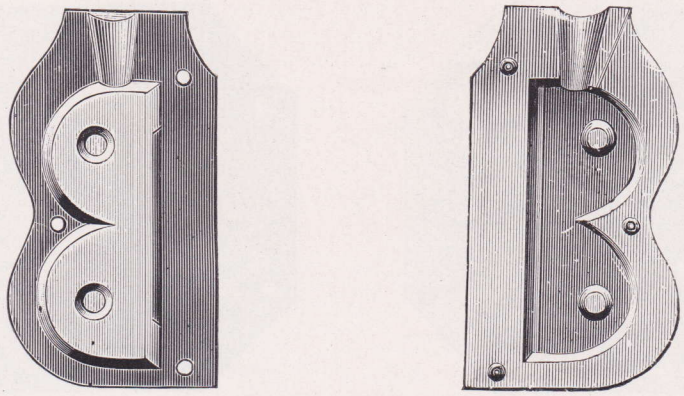


Made of gray iron.

Number	121	121
Style	10 bar	15 bar
Capacity, per bar	1 lb	1⅛ lbs
Weight, each	22½ lbs.	27½ lbs.

TACK MOULDS

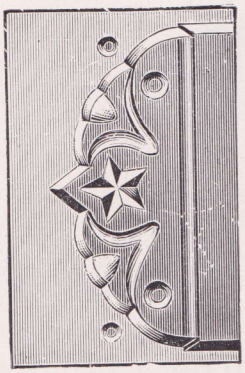
No. 122

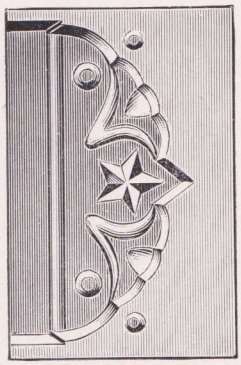


Plain single style.
Made of cast brass. Weight, each 1¼ lbs.

TACK MOULDS

No. 123

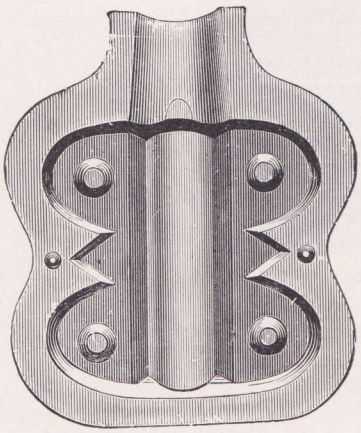


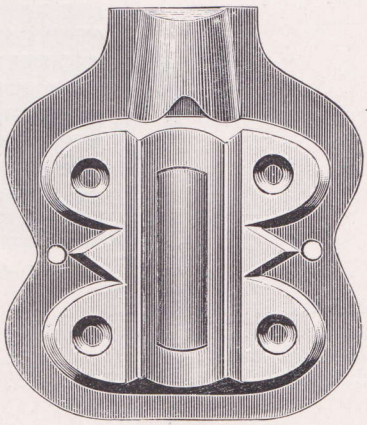


Fancy single style.

Made of cast brass. Weight, each 1¼ lbs.

No. 124

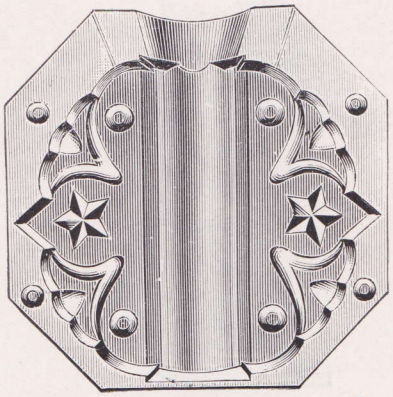


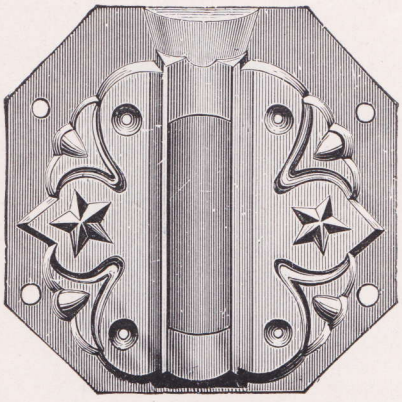


Plain double style.

Made of cast brass. Weight, each 2¼ lbs.

No. 125



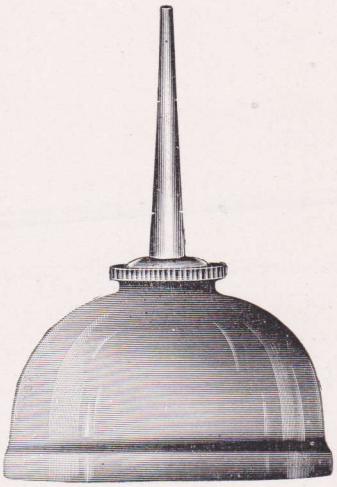


Fancy double style

Made of cast brass. Weight, each 2 lbs.

OIL CANS

No. 126

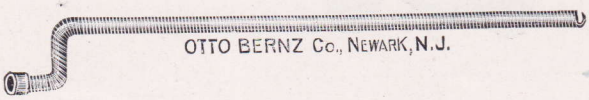


Made from drawn steel and heavily copper plated, inside and outside.

Number	12	13	13A	14A	14AA	15	15A
Diameter	2¾"	3⅜"	3⅜"	3¾"	3¾"	4⅛"	4⅛"
Nozzle	2½"	3"	5"	3"	5"	3"	5"
Capacity	¼ pt.	1/3 pt.	1/3 pt.	½ pt.	½ pt.	1 pt.	1 pt.
Weight, per dozen	2½ lbs.	3¾ lbs.	4 lbs.	4½ lbs.	5 lbs.	6 lbs.	6½ lbs.

PLUMBERS' BEST FRIEND PIPE CLEANERS

No. 127



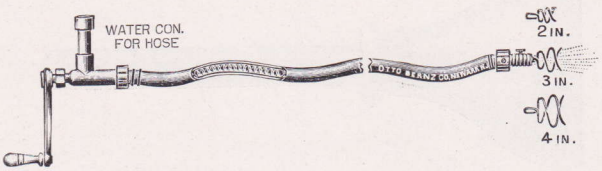
Made from flexible spiral steel spring, heavily japanned.

Size	5½ ft.	10 ft.	15 ft.	20 ft.	25 ft.
Weight, each	2 lbs.	3½ lbs.	5 lbs.	8 lbs.	11 lbs.

We can also furnish this article in the larger sizes.

FLITCROFT PIPE CLEANERS

No. 128



Made from flexible spiral steel spring, heavily japanned.

Size	15 ft. with hose	15 ft. without hose	25 ft. with hose	25 ft. without hose	35 ft. with hose	35 ft. without hose
Weight, each	13 lbs.	10½ lbs.	17 lbs.	13 lbs.	26 lbs.	20 lbs.

CLOSET AUGERS

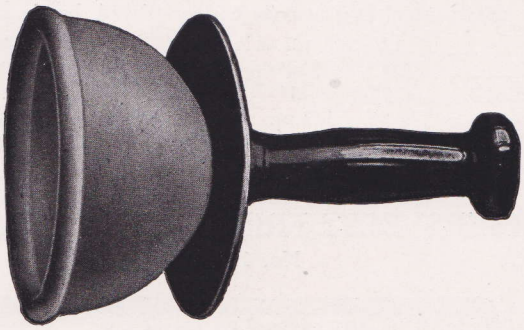
No. 129

Made from flexible spiral steel spring, heavily japanned. Tube in which spring slides is brass.

Size	3 ft.	6 ft.	9 ft.
Weight, each	2¾ lbs.	3¾ lbs.	4¾ lbs.

FORCE CUPS

No. 130

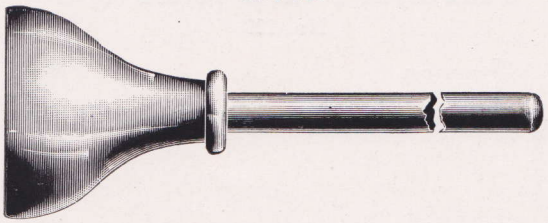


Number	1	2	3
Diameter	3¼"	3¾"	4½"
Weight, per dozen	4½ lbs.	5¼ lbs.	6 lbs.

Cups are made of a good grade of flexible rubber which will give satisfactory results.

PLUMBERS' FRIENDS

No. 131

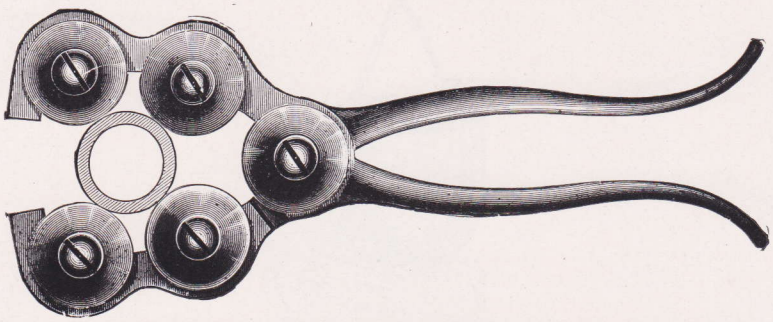


Made of a good grade of flexible rubber. Furnished regularly with 36" handles. Shorter handles can be furnished if so desired.

Size	4"	6"
Weight, per dozen	18 lbs.	20 lbs.

LEAD PIPE CUTTERS

No. 132



Handles and frame are malleable iron. Wheels are made of a good steel which will hold a cutting edge.

Finish	Japanned	Nickel Plated
Weight, per dozen	11 lbs.	11 lbs.

PLUMB BOBS

No. 133

Made of gray iron. Furnished in japanned finish.

Size	Small	Large
Weight, per dozen	7½ lbs.	15 lbs.

SOLDER OR METAL POTS

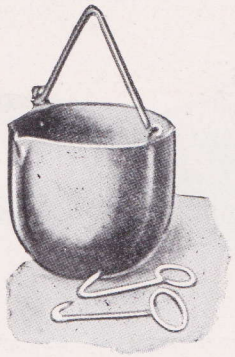
No. 134

Made of good quality gray iron.

Diameter	4″	5″	6″	6″E.H.	7″	8″
Depth	3″	3¼″	3¾″	3⅞″	4½″	5″
Capacity	7 lbs.	13½ lbs.	18½ lbs.	23 lbs.	28 lbs.	46 lbs.
Weight, each	2½ lbs.	2¾ lbs.	4⅛ lbs.	7¼ lbs.	6½ lbs.	9 lbs.
Diameter	9″	10″	12″	13½″	16¾″	19″
Depth	6″	6¼″	6½″	7¼″	7″	9½″
Capacity	55 lbs.	92 lbs.	157 lbs.	166 lbs.	200 lbs.	325 lbs.
Weight, each	13½ lbs.	16 lbs.	28 lbs.	43½ lbs.	53 lbs.	68 lbs.

POURING POTS

No. 135



Made from pressed steel. Furnished with 2 hooks.

Diameter	7″	8″	9″	10″
Depth	5″	6″	6″	7″
Capacity	50 lbs.	100 lbs.	125 lbs.	150 lbs.
Weight, each	4 lbs.	5 lbs.	6 lbs.	12 lbs

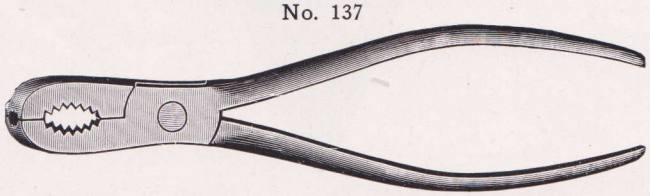
POT HOOK

No. 136

Made from $\frac{5}{16}$″ iron rod. Weight, per dozen 1½ lbs.

BURNER PLIERS

No. 137

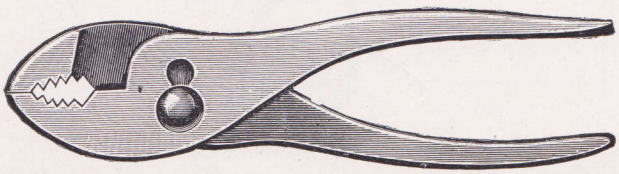


Made of forged steel. Furnished in full polished finish.

Size	5″	6″
Weight, per dozen	3 lbs.	4 lbs.

REGULAR COMBINATION PLIERS

No. 138



Made of forged steel.

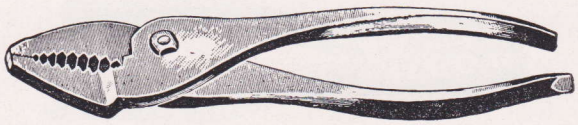
Size	5″	6″	6″ with knurled handle	8″	10″
Weight, per dozen	3 lbs.	6 lbs.	6 lbs.	8 lbs.	12 lbs.

Can be furnished in nickel-plated and black finishes.

Cheaper quality. 6″ nickel-plated, with knurled handle.
Weight, per dozen 6 lbs.

THIN BENT NOSE COMBINATION PLIERS

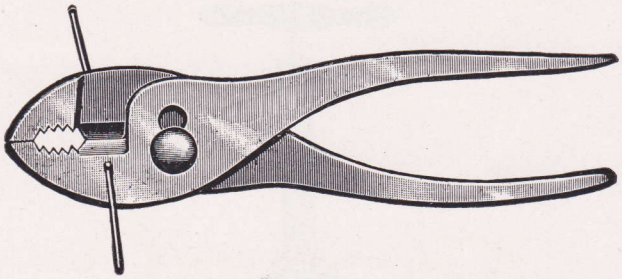
No. 140



Made of forged steel. Can be furnished in nickel-plated and black finishes.
6″ size only. Weight, per dozen 5¼ lbs.

SIDE CUTTING COMBINATION PLIERS

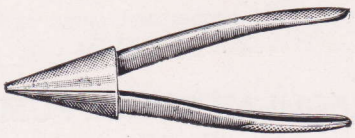
No. 141



Made of forged steel. Can be furnished in nickel-plated and black finishes.
6″ size only. Weight, per dozen 8½ lbs.

EXPANDING PLIER

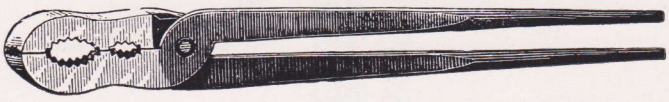
No. 142



Made of heavy sheet steel so as to give durable service.
Weight, each 1½ lbs.

GAS PLIERS

No. 143



Made of forged steel. Furnished in full polished finish.

Size	7″	8″	9″	10″	12″	14″
Weight, per dozen	5¼ lbs.	8 lbs.	9 lbs.	11½ lbs.	16 lbs.	21 lbs.

REGULAR SIDE CUTTING PLIERS

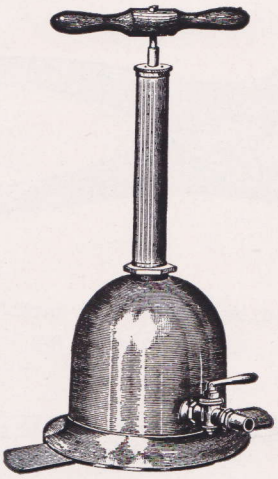
No. 144

Forged from tool steel, with spring tempered handle.
Can be furnished in the standard and the competition qualities.

Size	4″	5″	6″	7″	8″
Weight, per dozen	2½ lbs.	3½ lbs.	5½ lbs.	7 lbs.	10 lbs.

GAS MAIN FORCE PUMP

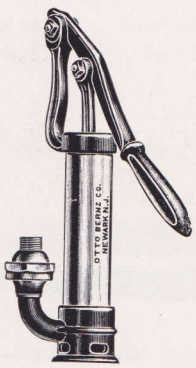
No. 145



Tank is made of heavy copper and pump cylinder is brass.
Weight, each 14 lbs.

REGULAR FORCE PUMP

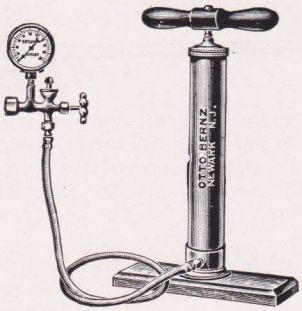
No. 146



Heavily constructed of brass tubing and gray iron.
Weight, each 9½ lbs.

TESTING PUMP WITH AIR GAUGE, ETHER COCK AND HOSE

No. 147



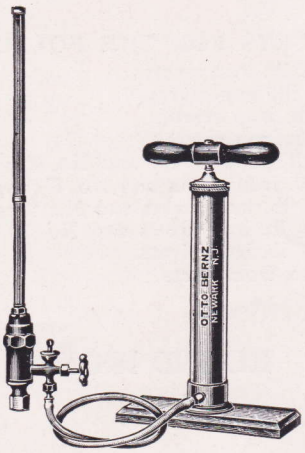
Testing pump is made of heavy brass tubing, and is fitted with a large wood handle. Air gauge has iron case with brass ring and is furnished with brass cover. Ether cock is made of cast brass.

Article	Outfit as shown above	Testing pump.	Air gauge	Ether cock	3 foot hose
Weight, each	6 lbs.	4½ lbs.	½ lb.	¾ lb.	¼ lb.

We can furnish air gauges with capacity from 20 pounds up.

TESTING PUMP WITH REGULAR OLD STYLE MERCURY COLUMN AND HOSE

No. 148

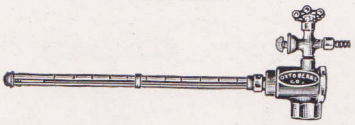


Testing pump is made of heavy brass tubing and is fitted with a large wood handle. Mercury column is fitted with a glass tube which is guarded by a brass shield. This shield is graduated for the convenience of the user. This style mercury column must be emptied after each job. No mercury furnished with this outfit.

Article	Outfit as shown above	Testing pump.	Regular old style mercury column with ether cock attached	3 foot hose
Weight, each	7 lbs.	4½ lbs.	2¾ lbs.	¼ lb.

NON-SPILLABLE MERCURY COLUMN

No. 149



This mercury column is fitted with a transparent celluloid tube which will not break as does the glass tube used on other style. A brass shield is placed around this celluloid tube, which is graduated for the convenience of the user. This style is always charged with mercury, therefore always ready for use. Mercury always furnished with this column.

Article	Testing pump with non-spillable mercury column and hose	Testing pump	Non-spillable mercury column with ether cock attached	3-foot hose
Weight, each	6¾ lbs.	4½ lbs.	2½ lbs.	¼ lb.

RIVET SETS AND HEADERS

No. 150

Made of extra cast steel.

Number	00 and 0	1 and 2	3 and 4	5 and 6	7 and 8
Weight, per dozen	10 lbs.	4½ lbs.	4¼ lbs.	2 lbs.	2 lbs.

ABOVE RIVET SETS FOR THE FOLLOWING RIVETS:

No. 00 for 12 lb. iron rivets.
No. 0 for 10 lb. iron rivets.
No. 1 for 8 lb. iron rivets.
No. 2 for 6 lb. iron rivets.
No. 3 for 5 lb. iron rivets and No. 7 copper rivets.
No. 4 for 3 lb. iron rivets and No. 8 copper rivets.
No. 5 for 1¾ lb. iron rivets and No. 9 copper rivets.
No. 6 for 1½ lb. iron rivets and No. 10 copper rivets.
No. 7 for 1¼ lb. iron rivets.
No. 8 for 1 lb. iron rivets.

ROUND IRONS

No. 151

Heads and handles are made of a good grade of iron and are welded securely.

Size	Small	Medium	Large
Weight, per dozen	18 lbs.	21 lbs.	28 lbs.

RULES

No. 152

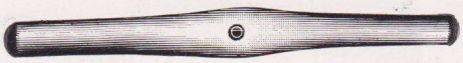
Two foot folding. Made of boxwood.

Number	152	153
Style	Plain	Brass bound
Weight, per dozen	1¼ lbs.	2½ lbs.

SAND PLUGS

No. 154

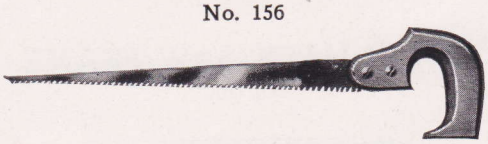
No. 155



Made of dogwood. Assorted sizes and shapes.
Weights depend on sizes and shapes ordered. Can be furnished on application.

COMPASS SAWS

No. 156

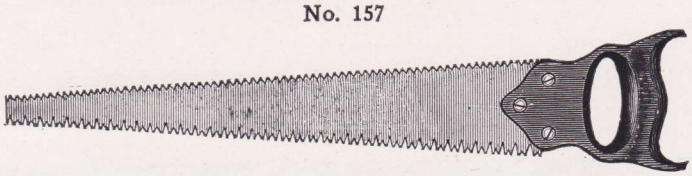


Made from a special steel which is carefully heat-treated and tempered so it will hold a good sharp cutting edge.

Size	10″	12″	14″
Weight, per dozen	3½ lbs.	5 lbs.	6 lbs.

DOUBLE EDGE SAWS

No. 157



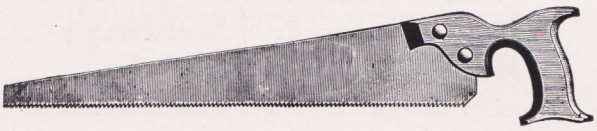
For wood and metal.

Made from a special steel which is carefully heat-treated and tempered so it will hold a good sharp cutting edge.

Size	12″	14″
Weight, per dozen	10 lbs.	11 lbs.

SINGLE EDGE SAWS

No. 158



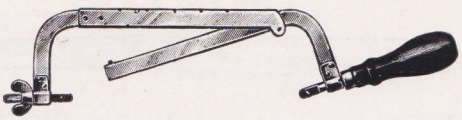
For wood.

Made from a special steel which is carefully heat-treated and tempered so it will hold a good sharp cutting edge.

Size	12″	14″
Weight, per dozen	9 lbs.	10½ lbs

ADJUSTABLE HACK SAW FRAME

No. 159

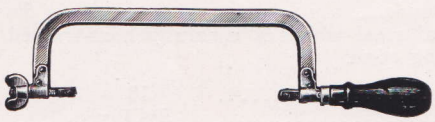


Made of cold drawn steel, heavily nickel plated. Handle furnished in mahogany finish. Furnished without blades unless otherwise ordered.

For 8″, 9″, 10″ and 12″ blades. Weight, per dozen 12 lbs.

SOLID HACK SAW FRAME

No. 160

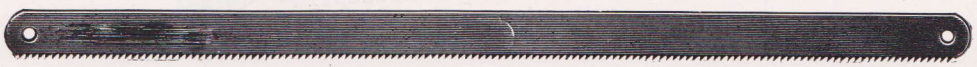


Made of cold drawn steel, heavily nickel plated. Handle furnished in mahogany finish. Furnished without blades unless ordered otherwise.

For 8″ blade. Weight, per dozen 9 lbs.

BLADES FOR HACK SAW FRAMES

No. 161



Made of carbon, and tungsten steel.

Size	8″	9″	10″	11″	12″
Weight, per gross	4⅛ lbs.	4⅝ lbs.	5⅜ lbs.	5⅞ lbs.	6¼ lbs.

SCREW DRIVERS

No. 162

Blades are made of good grade steel and are fastened into handle so they cannot turn. Fitted with long steel ferrule, and wood handle in rubberized finish.

Size	2″	3″	4″	5″	6″	7″	8″	10″	12″	14″
Weight, per dozen	1½ lbs.	2¼ lbs.	3 lbs.	3½ lbs.	4 lbs.	5 lbs.	6 lbs.	7 lbs.	8 lbs.	9 lbs.

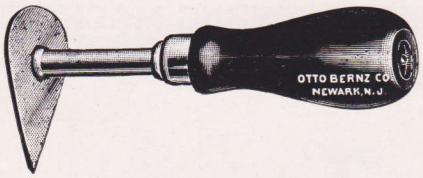
SCREW DRIVER HANDLES

No. 163

Size	For 2″ to 5″	For 6″ to 8″	For 10″ to 14″
Length	5″	6″	7″
Weight, per dozen	1½ lbs	1¾ lbs.	2 lbs.

REGULAR SHAVE HOOKS

No. 164



Oval style.

Blades are made of good steel which will hold a sharp edge. Shanks are made of malleable iron. Wood handles are furnished in black stained finish.

No. 165—HALF OVAL STYLE **No. 166—TRIANGULAR STYLE**

Weight, per dozen 2¼ lbs.

BLADES FOR REGULAR SHAVE HOOKS

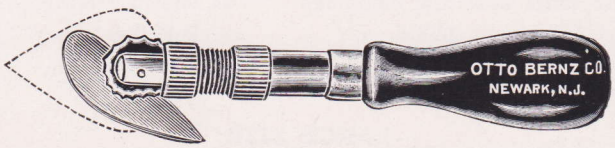
No. 167 **No. 168** **No. 169**

Oval Half oval Triangular

Weight, per dozen ½ lb.

ADJUSTABLE SHAVE HOOK

No. 170



Blade can be used in any angle. This tool can also be used, in many cases, as a tap borer, and for cutting and marking when blade is turned in line with handle. Blade is made of good steel, which will hold a sharp edge. Wood handle is in black stained finish.

Weight, per dozen 4 lbs.

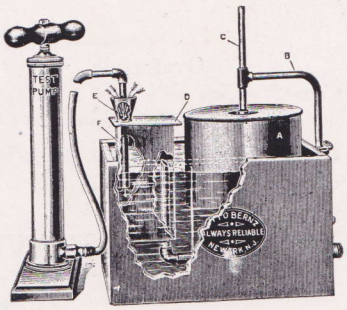
SIDE EDGERS

No. 171

Kind	Dogwood	Boxwood	Lignum Vitae
Weight, per dozen	3½ lbs.	4 lbs.	6 lbs.

SMOKE TESTING MACHINES

No. 172



Interior is made entirely of copper. Box is of wood and is neatly painted. The testing pump is made of heavy brass tubing and is fitted with a large wood handle.

SMALL SIZE (Box 13½"x9"x13½")

Article	Outfit as shown above, also large hose and couplings	Machine with pump only as shown above	Machine only
Weight, each	32 lbs.	26½ lbs.	20½ lbs.

LARGE SIZE

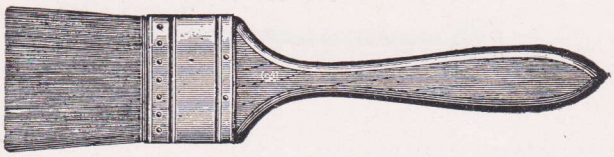
Article	Outfit as shown above, also large hose and couplings	Machine with pump only as shown above	Machine only
Weight, each	42½ lbs.	37 lbs.	31 lbs.

SOIL BRUSHES

No. 173

Size 5/8" round — Weight, per dozen ½ lb.

No. 174



Size 1" flat. — Weight, per dozen ½ lb.

SOIL CUPS

No. 176

Made from sheet copper.

Number	175	176
Style	With handle	Without handle
Weight, per dozen	1½ lbs.	1½ lbs.

PREPARED SOIL

No. 177

Put up in tin cans with tight covers.

Size	Pint can	Quart can
Weight, per dozen	18 lbs.	30 lbs.

SOLDERING COPPERS

Pointed Style (Two Prong)
No. 178

Swivel Hatchet Style
No. 179

Rigid Hatchet Style
No. 180

Style	Pointed	Swivel hatchet	Rigid hatchet
Price, per lb., net	Base	$ .10 extra	$ .05 extra

Following extras apply to all styles:

Weight to pair	3 lbs and heavier	2½ lbs.	2 lbs.	1½ lbs.	1 lb.
Price, per lb., net	Base	$ .01	$ .02	$ .03	$ .06

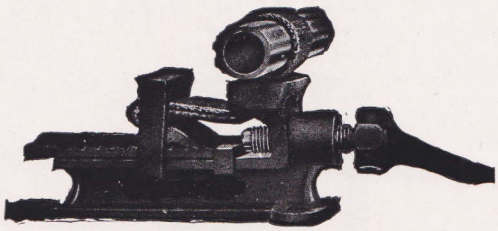
SOLDERING COPPER HANDLES

No. 181

Regular wood style with steel ferrule. Weight, per dozen 1½ lbs.

STRAP PIPE VISE

No. 182



Made entirely of malleable iron. The straps are of linen, therefore, will give long service.

For nickel plated and brass pipe and tubing, measuring ⅛" to 2" in diameter. Weight, each 6½ lbs.

STRAP FOR PIPE VISE

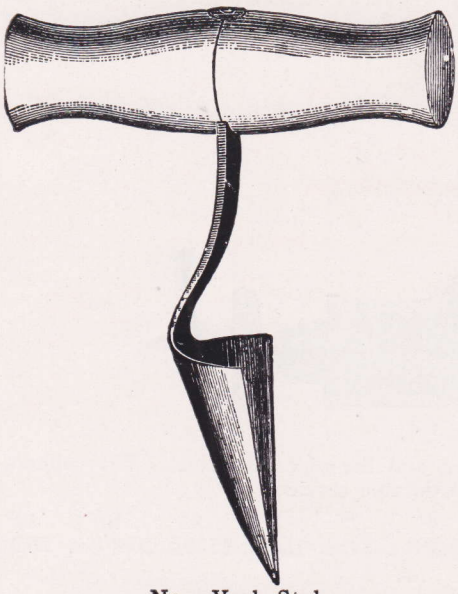
No. 183

Strap made of linen, therefore, will give long service.

Weight, per dozen 2 lbs.

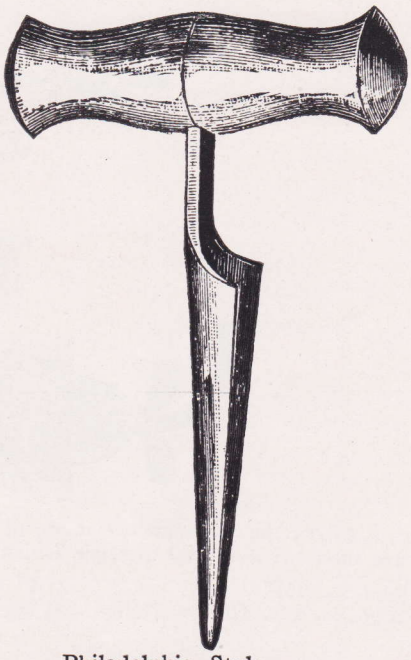
TAP BORERS

No. 184



New York Style

No. 185



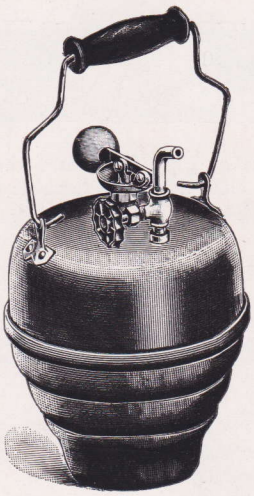
Philadelphia Style

Made of crucible annealed spring steel and fitted with varnished wood handle.

Style	New York	Philadelphia
Weight, per dozen	3 lbs.	4 lbs.

THAWING STEAMER

No. 186

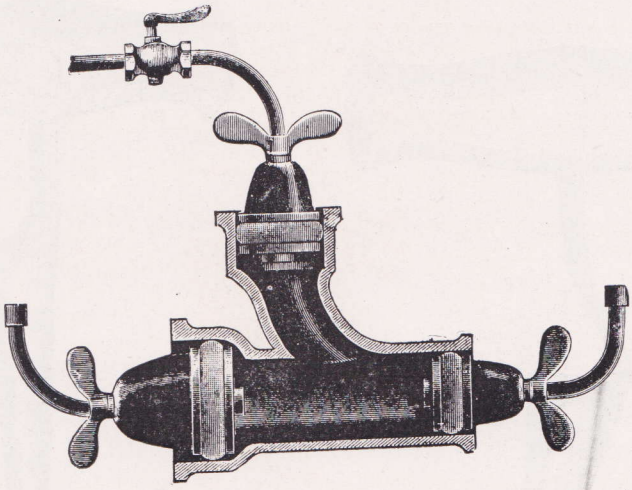


Reservoir is made of copper. Safety valve is made of brass and has a lead ball which raises automatically at 50 pounds pressure. This article can be used with the ordinary plumber's furnace.

Weight, each 3½ lbs.

WING NUT TESTING PLUGS

No. 187

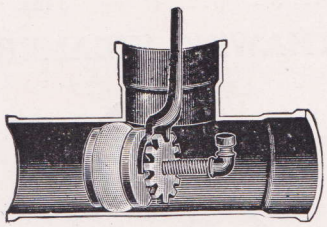


All of the castings are made of grey iron, and the pipes are steel. The rubbers are made of a special mixture which will give durable service.

Size....	1½″	2″	3″	4″	5″	6″	7″	8″	9″	10″	12″
Wgt., ea.	1 lb.	1½ lbs.	2½ lbs.	3¼ lbs.	4¾ lbs.	6¼ lbs.	8 lbs.	11 lbs.	15 lbs.	20¼ lbs.	26 lbs.

RATCHET TESTING PLUGS

No. 188



All of the castings are made of grey iron, and the pipes are steel. The rubbers are made of a special mixture which will give durable service.

Wrench is not included with these plugs, therefore, must be ordered separately.

Size.....	2″	3″	4″	5″	6″	7″	8″	9″	10″
Weight, each.....	1¼ lbs.	2 lbs.	3 lbs.	3½ lbs.	5 lbs.	7¾ lbs.	11 lbs.	14½ lbs.	19½ lbs.

WRENCH FOR RATCHET TESTING PLUGS

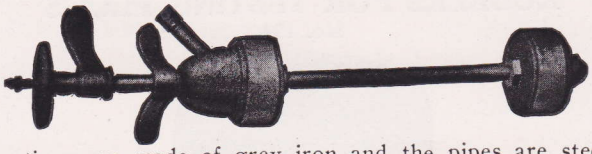
No. 189

Made of grey iron.

Weight, each 1 lb.

STRAIGHT DOUBLE TESTING PLUGS

No. 190

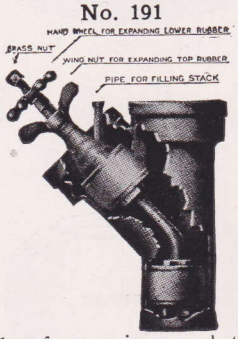


All of the castings are made of grey iron and the pipes are steel. The rubbers are made of a special mixture which will give durable service.

Size	2″	3″	4″	5″	6″	8″	10″	12″
Weight, each	2½ lbs.	7 lbs.	10 lbs.	13½ lbs.	17¼ lbs.	27½ lbs.	20¼ lbs.	26 lbs.

Y BRANCH TESTING PLUGS

No. 191

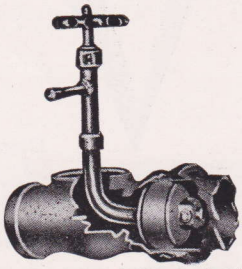


All of the castings are made of grey iron and the pipes are steel. The rubbers are made of a special mixture which will give durable service.

Size	2″	3″	4″	5″	6″	8″	10″
Weight, each	3¼ lbs.	5½ lbs.	8½ lbs.	13 lbs.	17 lbs.	27 lbs.	53½ lbs.

TEE TESTING PLUGS

No. 192

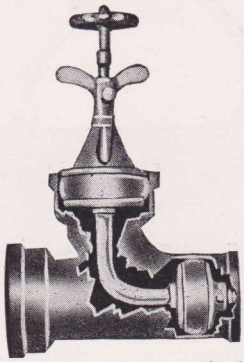


All of the castings are made of grey iron and the pipes are steel. The rubbers are made of a special mixture which will give durable service.

Size	2″	3″	4″	5″	6″	8″	10″
Weight, each	4 lbs.	4½ lbs.	6¼ lbs.	11 lbs.	12½ lbs.	17½ lbs.	30 lbs.

SANITARY TEE TESTING PLUGS

No. 193

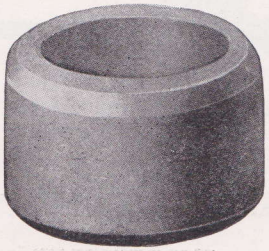


All of the castings are made of grey iron and the pipes are steel. The rubbers are made of a special mixture which will give durable service.

Size	3″	4″	5″	6″	7″	8″	9″	10″
Weight, each	7 lbs.	12 lbs.	15 lbs.	18¼ lbs.	25 lbs.	30¼ lbs.	40 lbs.	50 lbs.

RUBBERS FOR TESTING PLUGS

No. 194



Made of a special mixture of rubber so as to give durable service for use with testing plugs.

Size.....	.... 2"	3"	4"	5"	6"	7"	8"	9"	10"	12"
Weight, each....	1½ oz.	3½ oz.	6¼ oz.	8 oz.	11½ oz.	19 oz.	24 oz.	29 oz.	31 oz.	45 oz.

TURN PINS

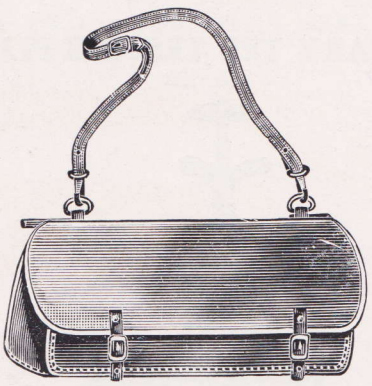
No. 195

Stock sizes as follows:	Dogwood	Boxwood	Lignum Vitae
No. 1—2" to 2¼"—Weight, per dozen.....	3 lbs.	3¼ lbs.	4 lbs.
No. 2—2¼" to 2¾"—Weight, per dozen.....	3¾ lbs.	4 lbs.	5½ lbs.
No. 3—2¾" to 3" —Weight, per dozen.....	4½ lbs.	4¾ lbs.	7½ lbs.

Larger sizes made to order

ELECTRICIANS' TOOL BAGS

No. 196

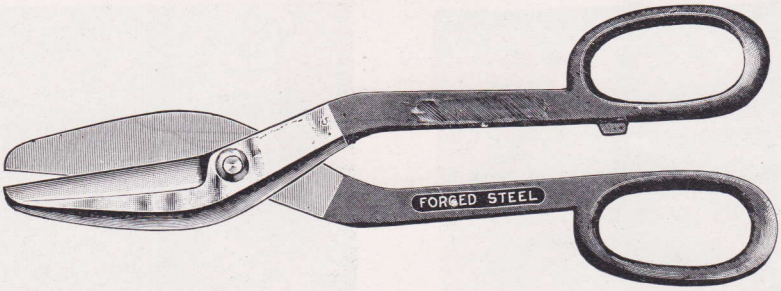


Made of heavy russet grain leather. Furnished with leather shoulder strap and pad. Each bag has an inside pocket for small tools.

Size	16"x6½"x8"	18"x7"x8"	20"x7"x9"	22"x7"x10"
Weight, each	3 lbs.	3½ lbs.	4 lbs.	4½ lbs.

TINNERS' STRAIGHT SNIPS

No. 197

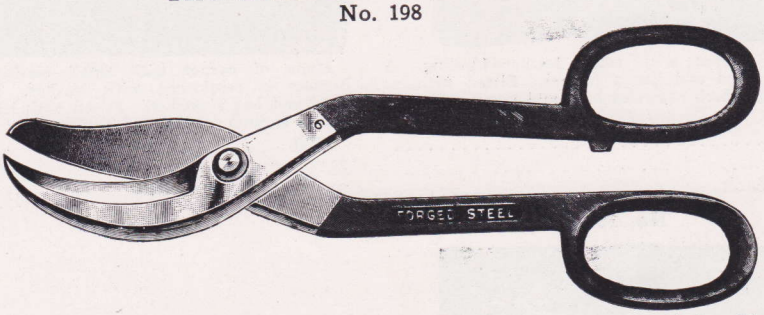


Bar tool steel laid blades. Handles are of forged steel and in blue finish.

Number	6½	7	8	9	10	11	12
Length of cut	4½"	4"	3½"	3"	2½"	2¼"	2"
Length, overall	15½"	14"	13"	12"	11"	9"	8"
Weight, each	42 lbs.	37½ lbs.	30 lbs.	24 lbs.	18 lbs.	9 lbs.	6 lbs.

TINNERS' CIRCULAR SNIPS

No. 198

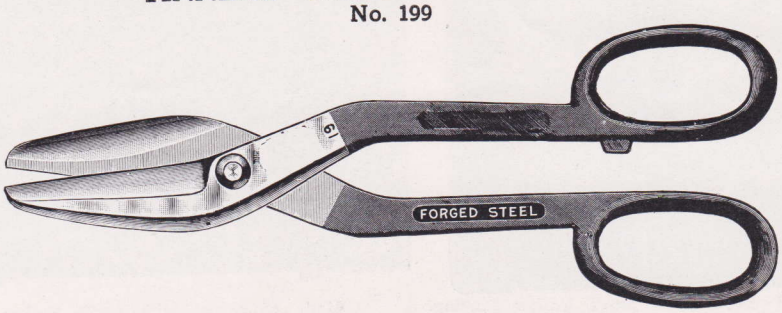


Bar tool steel laid blades. Handles are of forged steel and in blue finish.

Number	6½	7	8	9	10	11	12
Length of cut	4½"	4"	3½"	3"	2½"	2¼"	2"
Length, overall	15½"	14"	13"	12"	11"	9"	8"
Weight, each	45 lbs.	36 lbs.	27 lbs.	24 lbs.	18 lbs.	9 lbs.	6 lbs.

TINNERS' COMBINATION SNIPS

No. 199

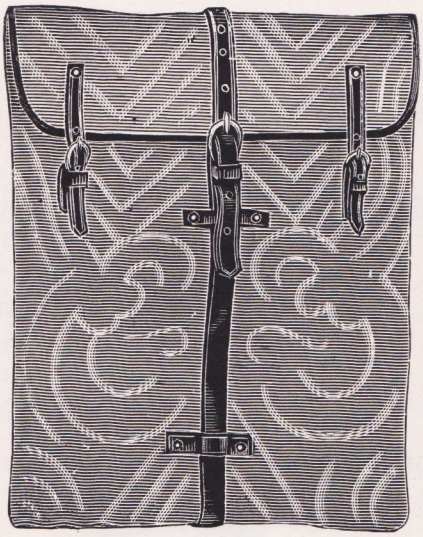


Bar tool steel laid blades. Handles are of forged steel and in blue finish.
This style for straight, circular, and irregular shapes.

Number	17	18	19	110
Length of cut	4"	3½"	3"	2½"
Length, overall	14"	13"	12"	11"
Weight, each	33 lbs.	30 lbs.	21 lbs.	18 lbs

PLUMBERS' TOOL BAGS

No. 200



Made of carpet with small leather binding. Interior is lined and has a pocket. Fitted with leather strap which encircles bag, and two smaller straps.

No. 201

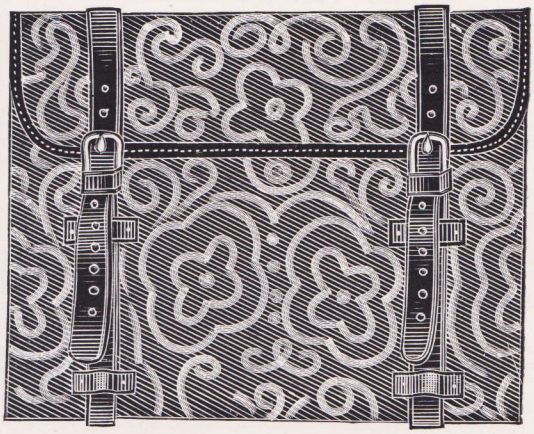
Made of carpet with small leather binding. Bottom is reinforced with leather. Interior is lined and has a pocket. Fitted with leather s rap which encircles bag, and two smaller straps.

Number	200	201
Size	22″x18″	22″x18″
Weight, each	2¼ lbs.	2½ lbs.

No. 202

Made of carpet with small leather binding. Sides and bottom are reinforced with leather. Interior is lined and has a pocket. Fitted with leather strap which encircles bag, and two smaller straps.

No. 203



Made of carpet with small leather binding. Interior is lined and has a pocket. Fitted with two straps which encircle bag.

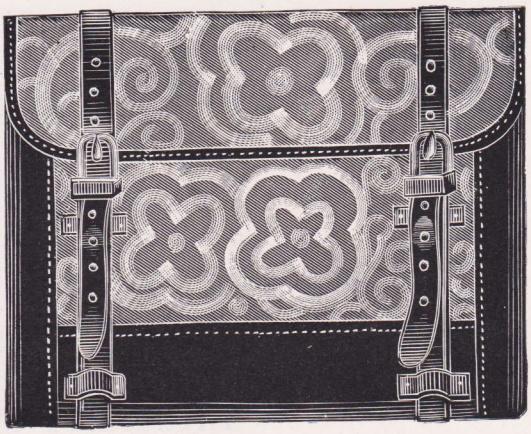
Number	202	203
Size	22″x18″	16″x25″
Weight, each	2¾ lbs	2½ lbs

PLUMBERS' TOOL BAGS

No. 204

Made of carpet with small leather binding. Bottom is reinforced with leather. Interior is lined and has a pocket. Fitted with two straps which encircle bag.

No. 205



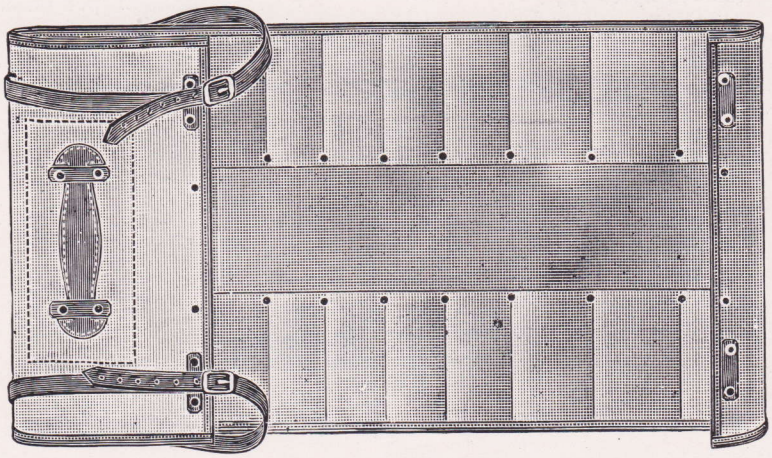
Made of carpet with small leather binding. Sides and bottom are reinforced with leather. Interior is lined and has a pocket. Fitted with two straps which encircle bag.

NO. 206 SAME STYLE AS NO. 201, BUT MADE ENTIRELY OF BROWN LEATHER.

	204	205	206
Number			
Size	16″x25″	16″x25″	16″x25″
Weight, each	2¾ lbs.	3 lbs.	2¼ lbs

PLUMBERS' TOOL ROLL

No. 207

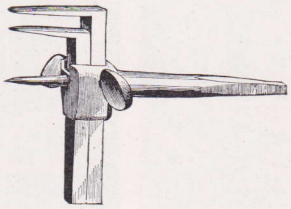


Made of 18 oz. white canvas. Has thirty pockets which are riveted and sewed. Edges are bound with leather binding. Furnished with two leather straps and leather handle for carrying purposes.

Size 56″ x 24″. Weight, each 3 lbs.

REGULAR WASHER CUTTER

No. 208

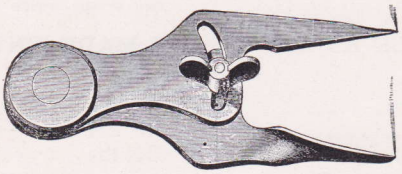


Shank is made of malleable iron and cutters are made of good tool steel.

Will cut washers from ½" to 5" in diameter. Weight, per dozen 5¼ lbs.

HAGGERTY WASHER CUTTER

No. 209

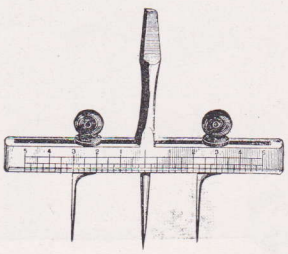


Made of steel, heavily nickel plated.

Will cut washers up to 1¾". Weight, per dozen 2¼ lbs.

REGISTERING WASHER CUTTERS

No. 210

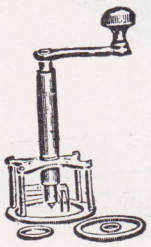


Shanks are made of malleable iron and cutters are made of good tool steel.

Size	Small	Large
Capacity	½" to 4" incl.	1" to 5" incl.
Weight, per dozen	5¼ lbs.	5¾ lbs

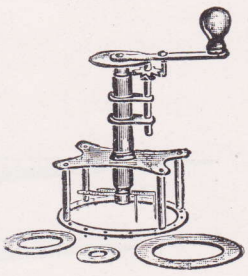
ROSE WASHER CUTTERS

No. 211



No. 212 same as No. 211, but in oxidized copper finish.

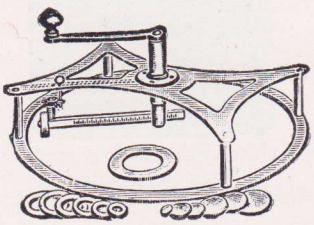
No. 213



No. 214 same style as No. 213, but larger capacity.

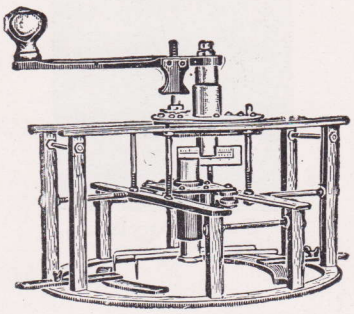
Number	211	212	213	214
Capacity	⅜" to 2"	⅜" to 2"	¾" to 4½"	1" to 10"
Weight, each	5½ oz.	5½ oz.	1¾ lbs.	7½ lbs.

No. 215



No. 216 same style as No. 215, but larger capacity.

No. 217



No. 218 same style as No. 217, but larger capacity.

No. 217 and No. 218 can also cut oval washers.

Number	215	216	217	218
Capacity	4½" to 21"	6" to 36"	1" to 10"	4" to 21"
Weight, each	15½ lbs.	33 lbs.	12½ lbs.	32 lbs.

The frames of all of the washer cutters shown above are made from strip steel suitable for the purpose intended. All of the cutters are made of a good tool steel.

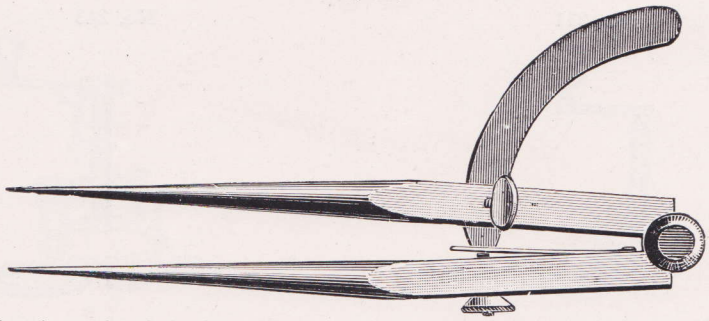
GLASS CUTTER ATTACHMENTS FOR ROSE WASHER CUTTERS

No. 219

Size	For No. 213	For No. 214	For No. 215	For No. 216	For No. 217	For No. 218
Weight, each	1 oz.	2½ oz.	½ oz.	½ oz.	2½ oz.	11 oz.

WING DIVIDERS

No. 220

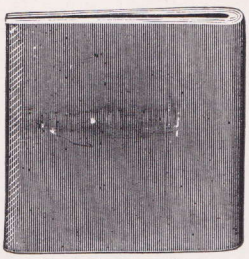


The wing is made of the best iron wire, bent and flattened by machinery. Washers are of brass. The arms are made of tool steel and the points are carefully hardened. The joint is firm which assures adjustments

Size	5″	6″	7″	8″	9″	10″	12″	15″	18″	24″
Weight, per dozen, lbs.	2⅝	3	3⅜	4	5¾	6¾	9	19	20½	25

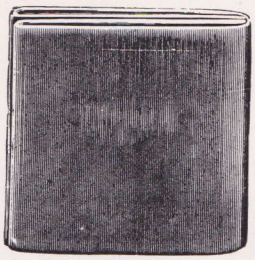
MOLESKIN WIPING CLOTHS

No. 221



Regular style.
Made in 6 ply.

No. 222



Folded like ticking style.
Made in 8 ply.

Made of good quality moleskin.

Size	2″x2″	2½″x2½″	3″x3″	3½″x3½″	4″x4″
No. 221—Weight, per dozen	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.
No. 222—Weight, per dozen	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.

Special sizes made to order.

TICKING WIPING CLOTHS

No. 223

Regular ticking.
Made in 16 ply.

No. 224

Herringbone ticking, narrow or wide stripe. Made in 16 ply.

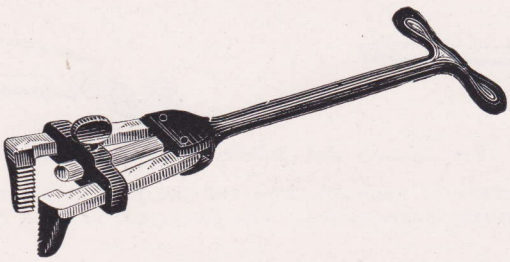
Made of good quality ticking

Size	2″x2″	2½″x2½″	3″x3″	3½″x3½″	4″x4″
Weight, per dozen	6 oz.	10 oz.	13 oz.	18 oz.	22 oz.

Special sizes made to order.

BUZZELL BASIN WRENCH

No. 225



Entire tool is made of malleable iron. Weight, per dozen 18 lbs.

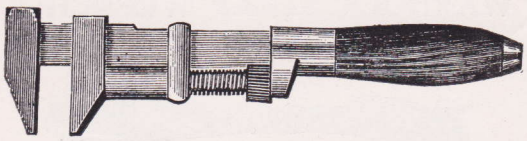
RILEY BASIN WRENCH

No. 226

Made entirely of malleable iron. Weight, per dozen 15 lbs.

MONKEY WRENCHES

No. 227

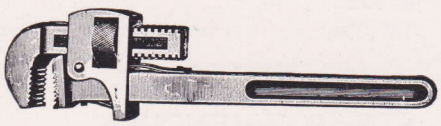


Made entirely of malleable iron with the exception of the screw which is turned from cold rolled steel. The handle is made from hardwood which has two coats of varnish.

Size	6″	8″	10″	12″	15″
Weight, per dozen	9 lbs.	16 lbs.	24 lbs.	30 lbs.	42 lbs.

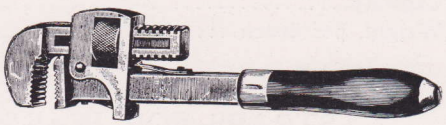
STILLSON WRENCHES

No. 228



With steel handle.
6″ to 14″ inclusive.

No. 229



With wood handle.
6″ to 48″ inclusive.

Size	6″	8″	10″	12″	14″	18″	24″	36″	48″
Weight, each, lbs.	4	9	17	25	35	52	93	188	320

The jaw and bar are made of drop forged tool steel with teeth milled and hardened. The frame is malleable iron. The adjusting nut, which is made of cold rolled steel, is knurled and hardened.

REGULAR STRAP WRENCHES

No. 230

For smooth and polished pipe and tubing.

The heads are made of malleable iron and the handles are made of steel tubing. Complete tool is heavily nickel plated. The straps are of linen and will give durable service.

Right hand cut shows wrench with strap in position for use on medium or heavy weight tubing. Left hand cut shows it for use on light weight.

Size	12″	18″
Capacity	⅛″ to 2″	1″ to 5″
Weight, per dozen	18 lbs.	33 lbs.

STRAPS FOR REGULAR STRAP WRENCHES

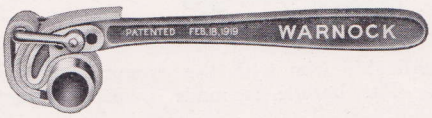
No. 231

Straps are made of linen, therefore, will give long service.

Size	For 12″ wrenches	For 18″ wrenches
Weight, per dozen	1 lb.	3 lbs.

WARNOCK STRAP WRENCHES

No. 232



For smooth and polished pipe and tubing.

The shackles are made from drop forgings and the handles are malleable iron. The straps are of linen and will give durable service.

Size	12″	18″
Capacity	⅛″ to 2″	1″ to 5″
Weight, per dozen	16½ lbs.	42¾ lbs.

STRAPS FOR WARNOCK STRAP WRENCHES

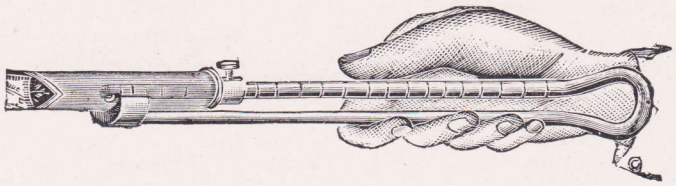
No. 233

Straps are made of linen, therefore, will give long service.

Size	For 12″ wrenches	For 18″ wrenches
Weight, per dozen	1 lb.	3 lbs.

GAUGE GLASS CUTTER

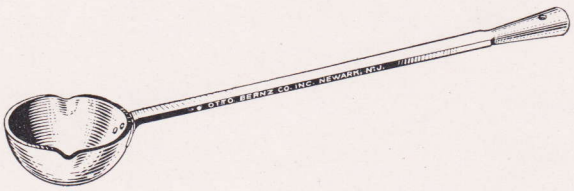
No. 234



Made of spring steel, heavily nickel-plated. Cutting wheel is Jessup steel.
Weight, per dozen 3 lbs.

SOCKET HANDLE MELTING LADLES

No. 235

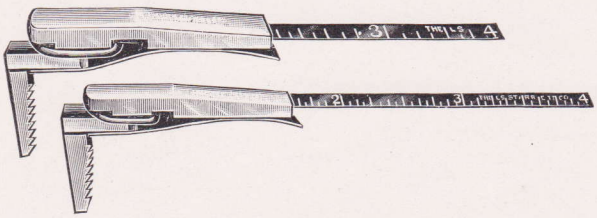


Iron handles are welded to bowls. Bowls are wrought iron. Double lipped style always furnished unless single lipped style is specified.

Outside diameter.....	6″	7″	8″	9″	10″	12″
Outside depth.....	3½″	3¾″	4¼″	4½″	5″	6¼″
Handle, including socket....	21″	24″	26″	30″	36″	40″
Capacity.....	15 lbs.	26 lbs.	45 lbs.	57 lbs.	80 lbs.	130 lbs.
Weight, per dozen.....	72 lbs.	90 lbs.	126 lbs.	162 lbs.	192 lbs.	276 lbs.

HOOK FOR MEASURING TAPES

No. 236



Made of cast bronze, heavily nickel plated.
Made in ¼″ and ⅜″ sizes. Weight, per dozen 12 oz.